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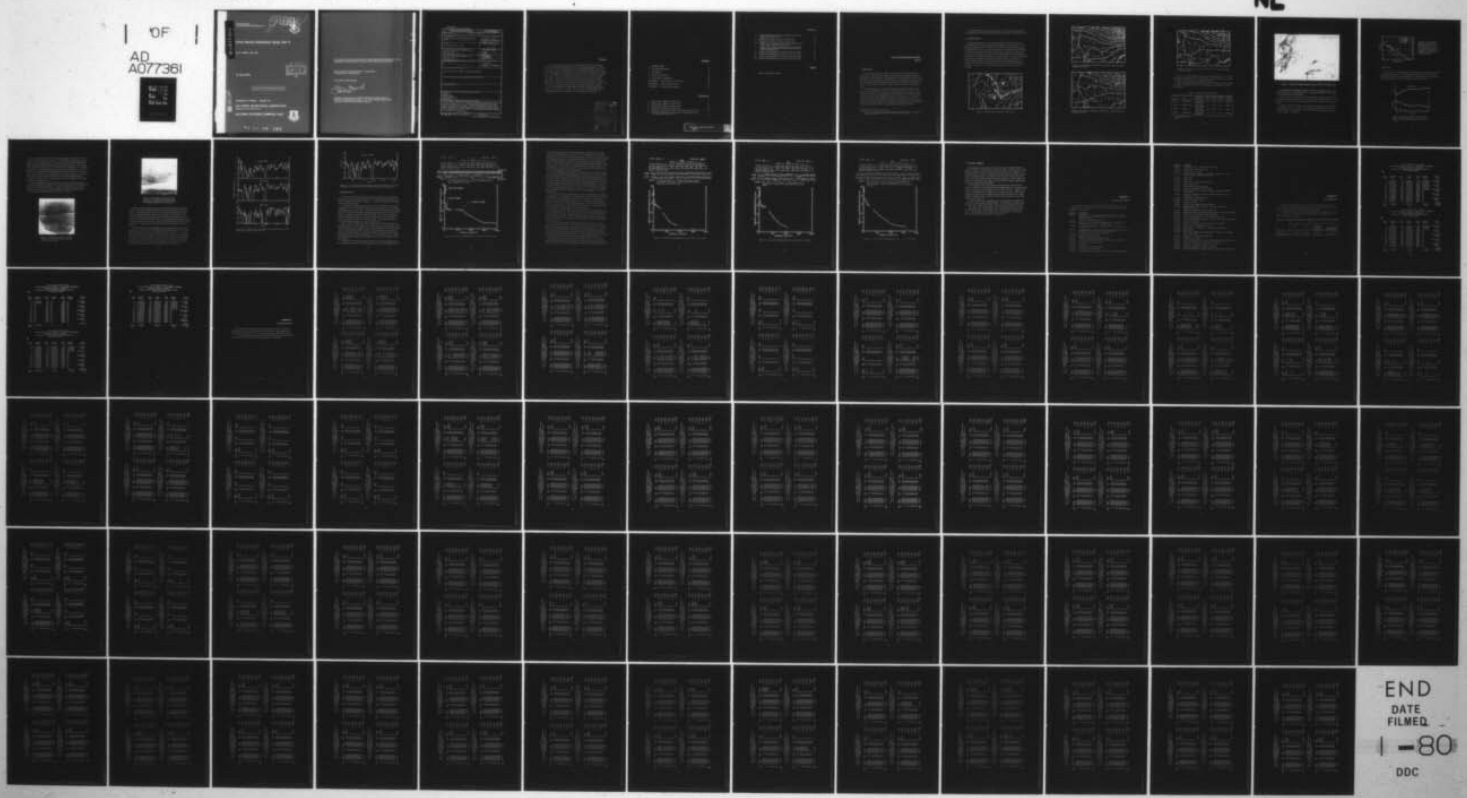

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Cirrus Particle Distribution Study, Part 5

IAN D. COHEN, Capt, USAF

13 July 1979

METEOROLOGY DIVISION PROJECT 317J

AIR FORCE GEOPHYSICS LABORATORY
HANSCOM AFB, MASSACHUSETTS 01731

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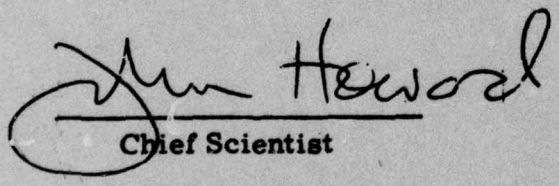

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On 19 March 1978 an MC-130E aircraft obtained ice particle data in cirrus clouds near Albuquerque, N. M. Some data were also obtained from a high altostratus layer below the cirrus. Printouts of particle size and average number distribution for consecutive 30-sec periods during the flight are presented. Additionally, graphical displays of average particle spectra and 2-D particle examples are given for five 3- to 5-min periods when cloud conditions were relatively homogeneous.

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Preface

This report continues the series of examinations of cloud particle spectra obtained during specific flights for the Air Force Weapons Laboratory by AFGL personnel. The aid of the pilots and crew of the 4950th Test Wing, who flew the instrumented MC-130E during the 19 March 1978 flight discussed herein, is gratefully acknowledged. I wish to thank Lt Col Donald J. Varley for his many suggestions which have been most useful in writing this report. I also want to thank Dr. Arnold A. Barnes, Jr. for reviewing the manuscript and for his helpful suggestions. The Mission Director for the flight was Capt Donald D. Cameron. His notes and observations greatly aided in assembling the data for the report. The technicians who monitored and maintained the sampling equipment aboard the aircraft were MSgt James F. Bush, TSgt Marshall B. Wright and SSgt Dennis L. LaGross, all of AFGL. The work of Mrs. Pat Sheehy and Ms Barbara Main in compiling and preparing the manuscript for publication was invaluable.

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Cirrus Particle Distribution Study Part 5

1. INTRODUCTION

This is the fifth report in a study of cirriform cloud particle distributions measured by an MC-130E of the 4950th Test Wing which was equipped with AFGL cloud physics instrumentation. The capabilities and limitations of the instrumentation on this aircraft have been discussed in the first report of this series by Varley.[1] The particular mission described here was flown on 19 March 1978 in support of the Air Force Weapons Laboratory's (AFWL) Advanced Radiation Technology Program.

The sampling flight of 19 March originated and terminated at Kirtland AFB, New Mexico, and lasted about two hours. It was flown in the area south of Albuquerque where there were extensive layers of altostratus and cirrostratus clouds. The main regions sampled consisted of a high altostratus deck, a relatively clear area between mid-level and higher clouds, and a cirrostratus layer. The five Particle Measuring System (PMS) spectrometers aboard the aircraft recorded large numbers of particles during most of the flight except when the aircraft was neither in, nor under, visible clouds. Such conditions were rare on this flight.

(Received for publication 12 July 1979)

1. Varley, D. J. (1978) Cirrus Particle Distribution Study, Part 1, AFGL-TR-78-0192, AD A061485.

A description of the general weather situation on 19 March and a discussion of the significant data obtained during the flight are outlined in the following section.

2. SYNOPTIC SITUATION

During the evening of 18 March and the morning of 19 March, a weak cold front moved south and west from the central plains towards New Mexico. Figure 1 shows its position at 1200Z on 19 March. By 1800Z, it became nearly stationary over eastern New Mexico. A weak low pressure area along the front was centered in the Texas Panhandle at that time. The polar air mass north of the front was overrun by warm moist air that resulted in extensive middle level cloudiness from western Texas to central New Mexico. The southerly flow of warm air near 700 mb (see Figure 2) contributed to the creation of this cloudiness. A short wave at middle and high levels plus a 300 mb jetstream over the southern boarders of Arizona and New Mexico resulted in cirrus and cirrostratus clouds over southern New Mexico. Figures 3 and 4 show the location of the short wave over Nevada at 1200Z.

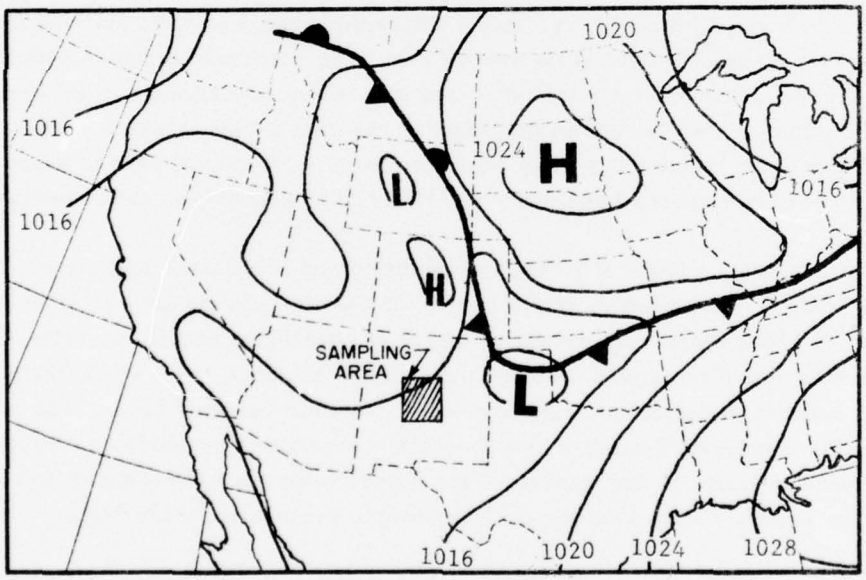


Figure 1. Surface Map at 1200Z on 19 March 1978

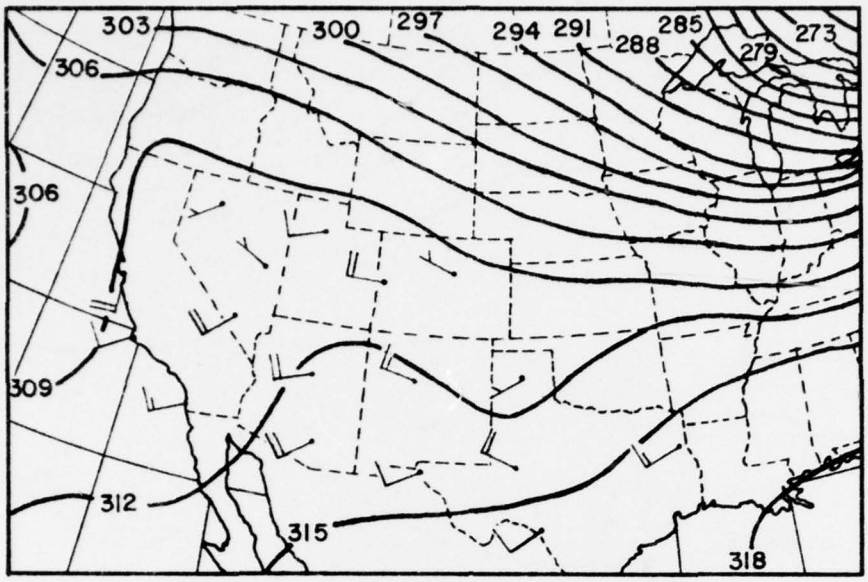


Figure 2. 700 mb Map at 1200Z on 19 March 1978. Values are tens of of geopotential meters

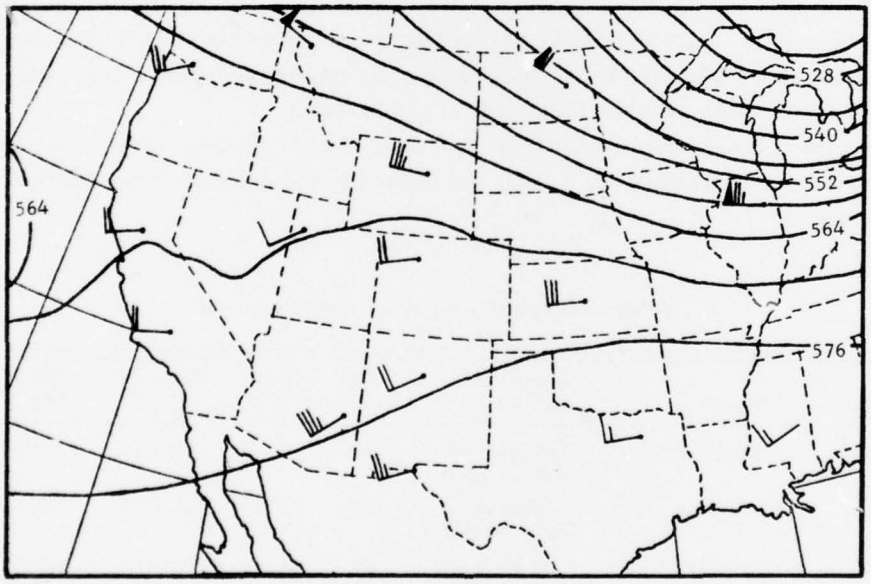


Figure 3. 500 mb Map at 1200Z on 19 March 1978. Values are tens of geopotential meters

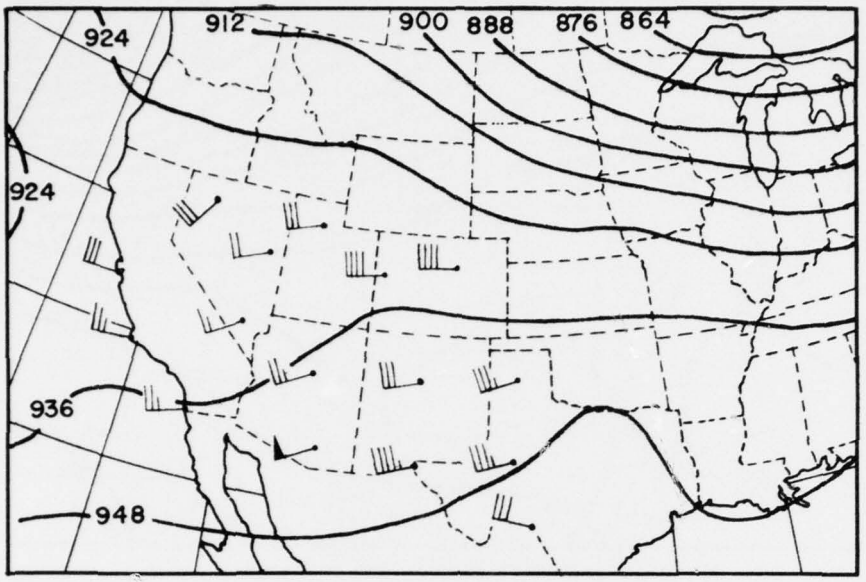


Figure 4. 300 mb Map at 1200Z on 19 March 1978. Values are tens of geopotential meters

Figure 5 is a GOES visible satellite picture of the southern U.S. at about the mid-point of the flight (1800Z). It shows extensive high cloudiness over central New Mexico. Some middle level cloud is also evident.

Surface reports during the flight showed extensive broken to overcast middle and high cloud throughout the area. The following are representative surface observations.

Table 1. Surface Weather Observations

Time	Station	Cloud Ht* and Extent	Vsby (mi)	Temp (°F/C)	Dew Pt (°F/C)	Wind (Dir/kt)
1700Z	Albuquerque	140 broken 200 broken	60	59/15	18/-8	160/04
1700Z	Holloman AFB	150 broken 250 overcast	40	70/21	14/-10	100/06
1700Z	Roswell	100 broken 150 overcast**	20	65/18	20/-7	100/07
1800Z	Albuquerque	140 broken 200 broken	60	63/17	18/-8	100/07

*in hundreds of feet
**thin

Figure 5. GOES East Visible Satellite Picture at 1800Z on 19 March 1978

The Albuquerque sounding for 1200Z on 19 March is shown in Figure 6. The moist layer from 7 to 9 km indicates a layer of clouds at 23,000 ft. An inversion at 7 km marked the base of this layer.

During its ascent, at 1700Z, the aircraft observed a similar inversion at 6 km. This indicates warm advection was occurring in the layer between 6 and 7 km. The dotted line on Figure 6 shows the temperatures reported by the aircraft during its ascent.

By 00Z on 20 March the 500-mb short wave shown in Figure 3 had moved over the Albuquerque area. As a result, the cloudiness increased and the moist layer had descended to the 500-mb level. The 500-mb dew point depression went from 17 deg at 1200Z to 0 deg at 00Z.

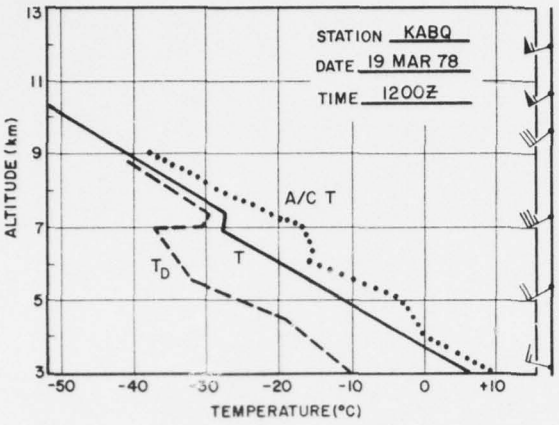


Figure 6. Portion of the Radiosonde Sounding Taken at Albuquerque, N. M. at 1200Z on 19 March 1978. The tropopause was at 16 km. The dotted line shows the temperature observed by the sampling aircraft between 1700Z and 1800Z

3. THE FLIGHT

The area south of Albuquerque was covered by layers of middle and high clouds on the morning of 19 March. The flight discussed here was made in order to sample both layers and the area between them. Profiles of the aircraft altitude and outside temperature during the flight are presented in Figure 7.

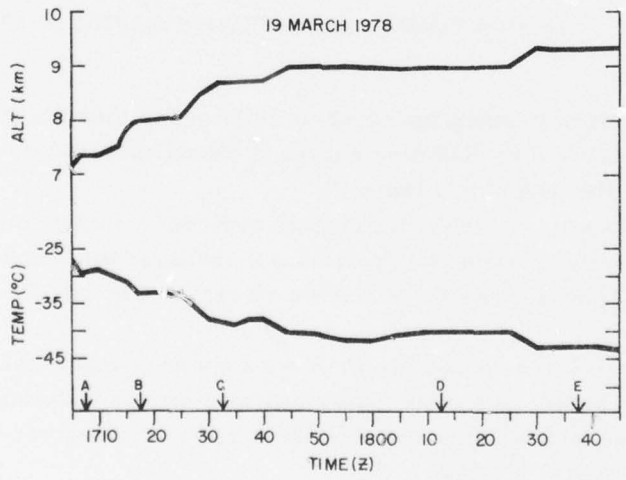


Figure 7. Profiles of Altitude and Temperature During the MC-130E Flight of 19 March 1978. Letters are at times for which data are examined in text

The aircraft departed Kirtland AFB at 1645Z and began a stepwise ascent. By 1705Z it was in an ice particle cloud at 7.3 km (24,000 ft) that appeared to be the upper part of an altostratus layer. At 1710Z a climb to 8.0 km (26,000 ft) began. Upon reaching this altitude the aircraft was between the altostratus and the cirriform clouds as seen in Figure 8. At 1752Z the aircraft climbed to 8.5 km (28,000 ft), where it was just below the base of a cirrus layer (see Figure 9). At 1740Z the climb was continued to 9.0 km (29,500 ft), where the aircraft was in the cirrus deck. A final climb to 9.3 km (30,500 ft) put the aircraft near the top of the cirrus. During this time, the aircraft remained in the area between Albuquerque and Socorro. See Appendix A for a transcription of some of the flight director's taped comments during the mission.

Particle sampling was conducted for the period from 1705Z (approximately 20 min after takeoff) until 1845Z, when the aircraft completed its last data pass and prepared to return to Kirtland AFB. A variety of crystal types was recorded as the aircraft moved from the mid-level altostratus clouds to the relatively clear layer between cloud decks and then to the higher cirrus layer.

Figure 8. Photograph of Clouds at 1722Z on 19 March 1978. Aircraft was in clear air between two cloud decks

Figure 9. Photograph of Clouds at 1730Z on 19 March 1978. Upper deck was somewhat thinner than in Figure 8, and particle counts had dropped considerably in a short time

The traces of the variation of ice water content (IWC) determined from the scatter, cloud, and precipitation probes from 1705Z to 1845Z are shown in Figure 10. A similar plot of the ice water content computed from the sum of the cloud and precipitation probe values is shown in Figure 11. Generally, water content was high as could be expected from a flight which was in clouds most of the time. Even while in the higher clouds, the precipitation probe registered large ice water content values. There were several short periods during which IWC was unusually low. These generally corresponded to times the aircraft was between layers.

As in previous cirrus sampling flights reported in this series, the PMS axial scattering, 1-D "cloud" and 1-D "precipitation" spectrometer probes were used. These recorded particles in the approximate ranges of 2 to 27 μm, 17 to 360 μm, and 320 to 5400 μm, respectively. The scatter probe is believed to overestimate the number of small ice crystals by an unknown amount. This uncertainty exists because the scattering properties of such crystals are not known. In addition to the 1-D probes, PMS 2-D "cloud" and "precipitation" probes provided "shadowgraphs" of particles as large as 800 μm and 6400 μm, respectively.

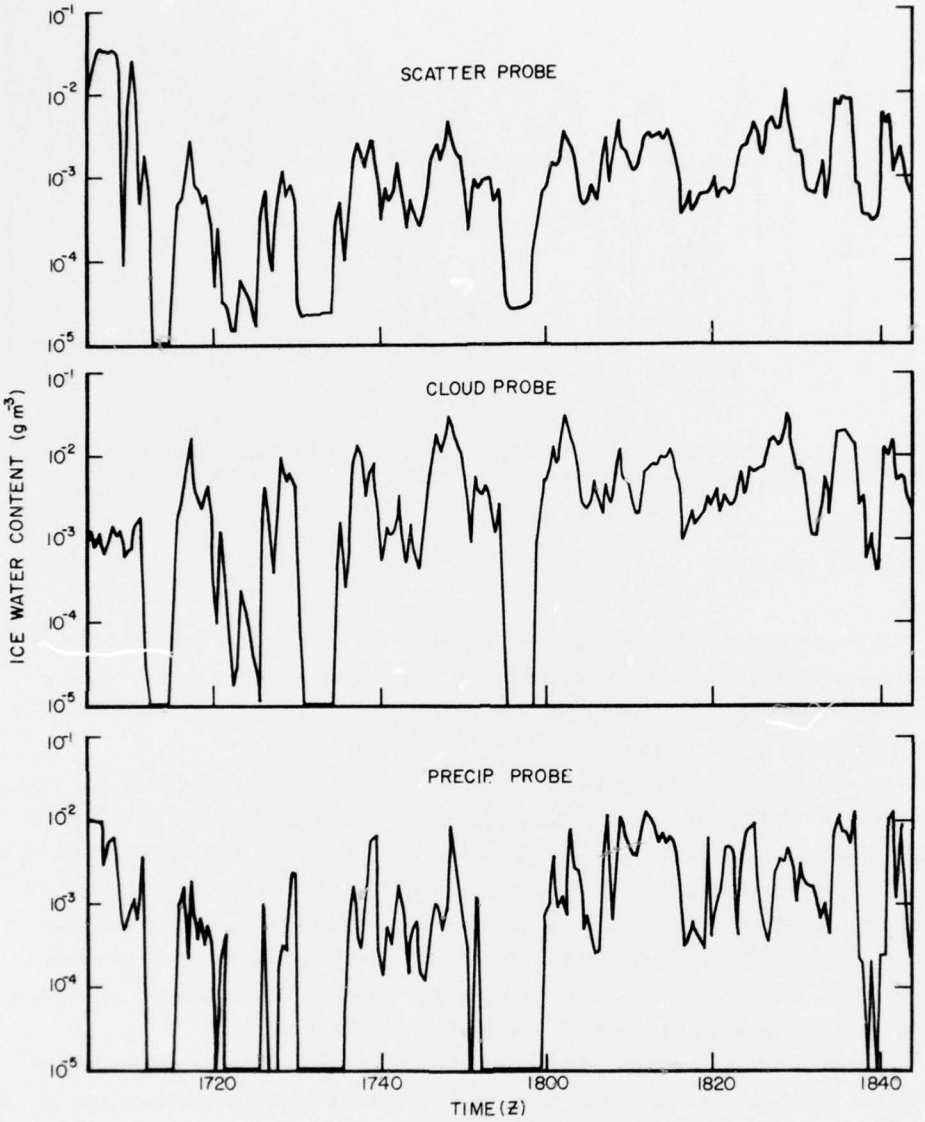


Figure 10. Variation of IWC Calculated From Measurements of 3 PMS Probes During Flight of 19 March 1978

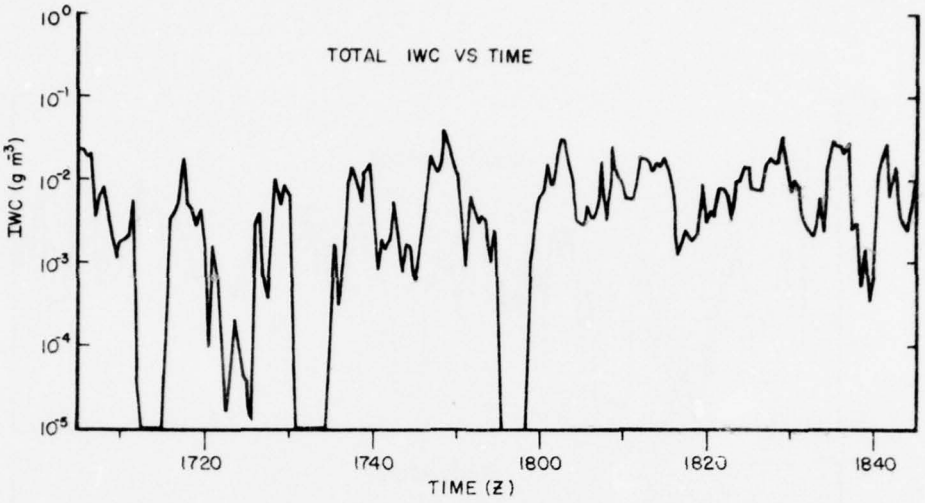


Figure 11. Variation of IWC as Determined From Probes Measuring Particles Approximately 17 to 5400 μm in Size During the Flight of 19 March 1978

4. EXAMPLES OF DATA

To illustrate the different kinds of particle data obtained, five portions of the flight were selected for closer examination. The times chosen are shown by the arrows and letters at the bottom of Figure 7. The letters correspond to the letters of the subparagraphs below.

(A) Figure 12 shows the particle spectrum observed during the 3-min period beginning at 1705Z. During this time the aircraft was passing in and out of the top of the altostratus layer at 7.3 km. The data from the PMS 2-D spectrometer probes revealed a variety of round-shaped particles considered to be in the "small-snow" category. Examples of particles from both the PMS 2-D cloud and precipitation probes are included on Figure 12. The scale appropriate to the 2-D particle is shown at the right side of the 2-D example particles. (The maximum dimension of the 2-D displays on Figures 13, 14, and 15 is 800 μm.)

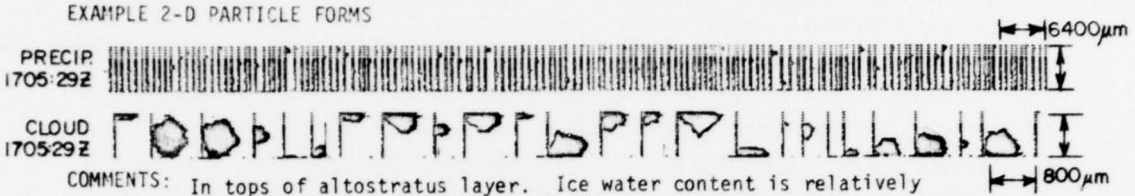
Figure 12 (data averaged from 1705 to 1708Z) shows a large concentration of particles in the 2 to 27 μm range that were recorded by the scattering probe. The ice water content (IWC) computed from scattering probe data was one of the highest values recorded during the flight. Between 75 and 750 μm the concentration of particles was nearly uniform. This may be related to the stratified nature of the clouds being sampled. The averaged particle concentration data for the individual probes are given in Appendix B to correspond with the Figure 12 through 15 spectrum displays.

(B) Figure 13 reflects the particle spectrum and 2-D forms existing between the altostratus and cirrus layers. The gap between the cirrus and altostratus was

ALTITUDE 7.3 km TEMPERATURE -28.8 °C

	SCATTER	PROBE CLOUD(C)	PRECIP(P)	C + P
ICE WATER CONTENT ($g\ m^{-3}$)	2.72×10^{-2}	8.87×10^{-4}	1.53×10^{-2}	1.62×10^{-2}
MED. VOL. DIAMETER (μm)	10	151	302	298

EXAMPLE 2-D PARTICLE FORMS



COMMENTS: In tops of altostratus layer. Ice water content is relatively high. Median diameter of C + P sizes is the largest of any sample examined in this report.

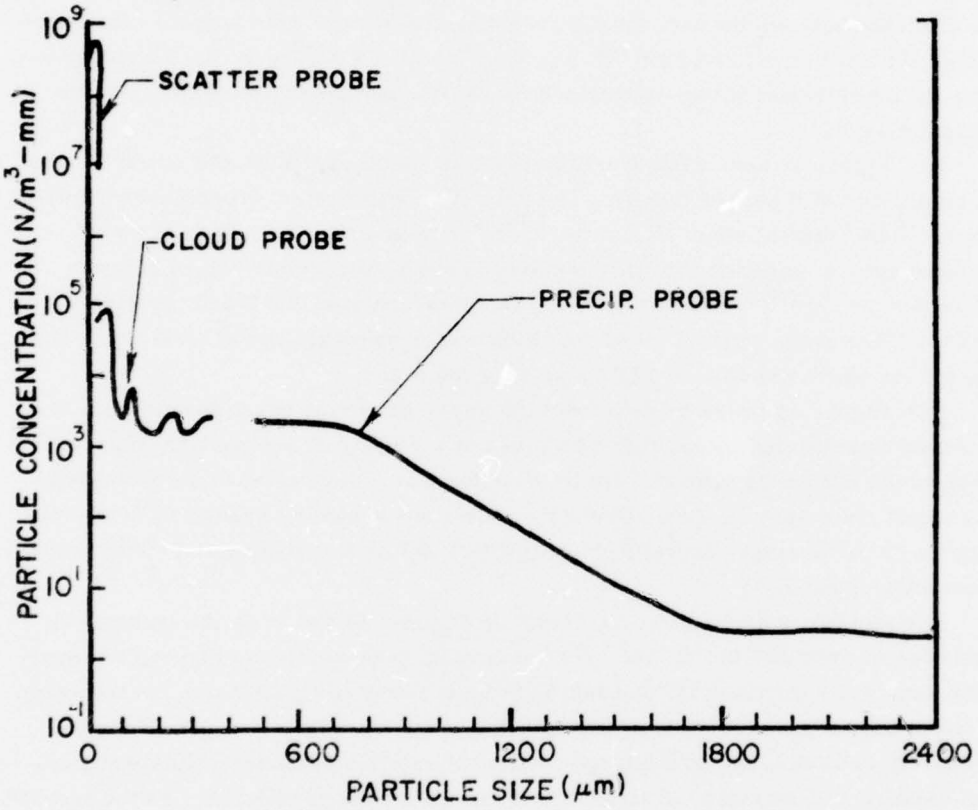


Figure 12. Particle Size Distribution for 19 March 1978; 1705-1708Z

small at this point, and the aircraft passed through occasional patches of thin cloud. The temperature at the time was -33°C, the frostpoint -36°C, and the dewpoint -39°C. As the 2-D cloud probe data show, the number of larger particles had diminished sharply from that indicated on Figure 12. Data from the precipitation probe indicated only a relatively few larger particles and none larger than 1100 μm. This is also confirmed by the extent of the particle distribution curves averaged from 1717Z to 1720Z. The transition from the condition in Figure 12 to that in Figure 13 occurred about 1709Z, when the flight director's log indicates the aircraft emerged from the altostratus layer.

(C) The photograph shown in Figure 9 was taken when the aircraft was climbing toward the cirrus through what appeared to be cloud free air. In fact, during the 5-min period between 1731 and 1735Z the only particles detected were 4 μm in size or smaller. Appendix B lists a printout of the few particles detected, but no graphical display is given here. The cloud conditions at the time were similar to those mentioned in (B) with thin cirrus above and altostratus below. However, the distance between the two cloud layers appears to have been larger. The computed IWC of the scatter probe fell to a very small 3×10^{-5} g m^{-3}. The temperature during this period was approximately -39°C, the frostpoint -43°C, and the dewpoint -47°C.

(D) Figure 14 shows the averaged particle spectrum within the cirrus clouds at an altitude of 9 km (29,000 ft). The particle concentration drops nearly linearly from $10^{6}/m^{3}$-mm at about 30 μm to $10^{0}/m^{3}$-mm at 1300 μm. Each of three spectrometers recorded data that resulted in ice water content values between 4 and 8×10^{-3} g m^{-3}. At this time the temperature was -40°C and the dewpoint -43°C. This same general cloud condition was persistent over at least the 5-min period for which the data on Figure 14 were averaged.

(E) Figure 15 presents data from the upper portion of the cirrus layer. At the time represented there, there was less of a variety of 2-D particle shapes than seen in the Figure 14 display. Bullet rosettes were more common in contrast to the small snow seen earlier. From the time represented by Figure 14 to that of Figure 15 the average ice water content (IWC) of both the scatter and cloud probes more than doubled.

The most noticeable difference between Figures 14 and 15 is the increase in particles of over 600 μm in size. The maximum particle size in Figure 15 is over 1900 μm, while in Figure 14, the maximum observed was only 1300 μm. In the range of the precipitation probe (above 380 μm) the median particle diameter changed relatively little because of the large number of smaller particles while the number and relative concentration of larger particles increased considerably as the aircraft moved from the base of the cirrus layer into the upper portion of that layer.

The median volume diameter for the cloud probe range (~17 to 360 μm) decreased with height due to the large increase in the number of smaller size particles. In both cases, the Mission Director reported the visibility to be an estimated one mile.

ALTITUDE 8.0 km TEMPERATURE -33.6 °C

	SCATTER	PROBE CLOUD(C)	PRECIP(P)	C + P
ICE WATER CONTENT ($g\ m^{-3}$)	1.15×10^{-3}	6.09×10^{-3}	7.73×10^{-4}	6.86×10^{-3}
MED. VOL. DIAMETER (μm)	18	119	219	125

EXAMPLE 2-D PARTICLE FORMS

CLOUD 1716:46

CLOUD 1716:47

COMMENTS: In occasional patches of cirriform cloud between the alto-stratus and cirrus layers. Largest particles were 1100 μm. Small snow is main crystal type.

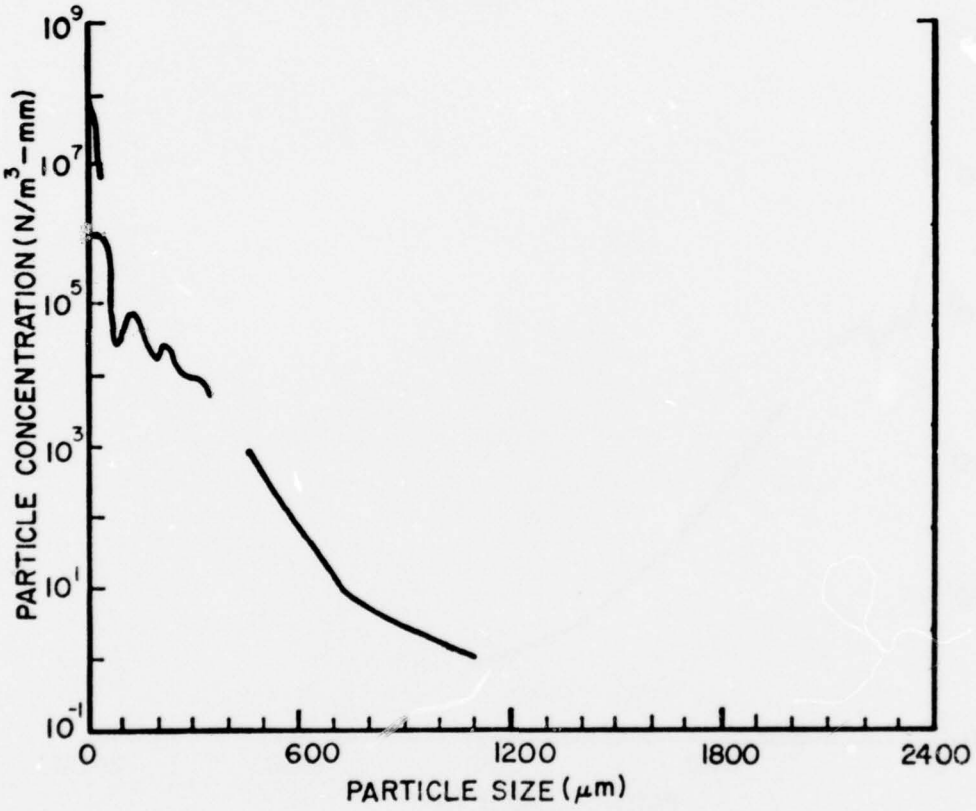


Figure 13. Particle Size Distribution for 19 March 1978; 1717-1720Z

ALTITUDE 9.0 km

TEMPERATURE -40.1 °C

	SCATTER	PROBE CLOUD(C)	PRECIP(P)	C + P
ICE WATER CONTENT ($g\ m^{-3}$)	2.50×10^{-3}	6.98×10^{-3}	5.50×10^{-3}	1.25×10^{-2}
MED. VOL. DIAMETER (μm)	18	108	197	134

EXAMPLE 2-D PARTICLE FORMS

COMMENTS: Near base of the cirrus layer. The largest particles are about 1300 μm. Both bullet rosettes and small snow are common.

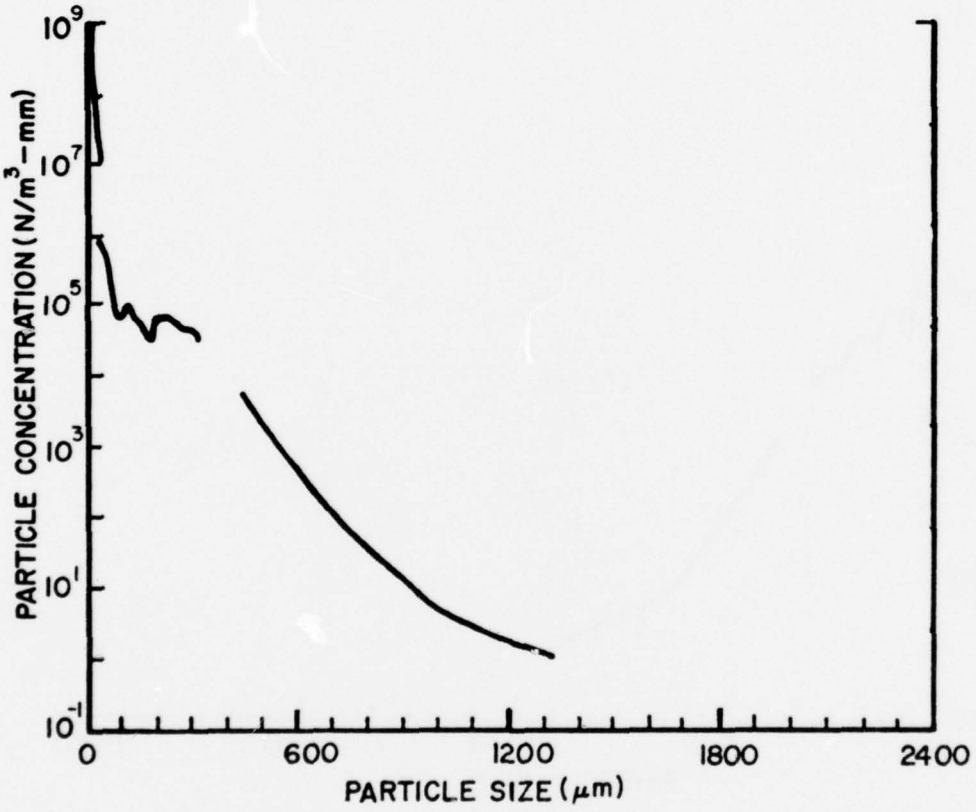


Figure 14. Particle Size Distribution for 19 March 1978; 1813-1818Z

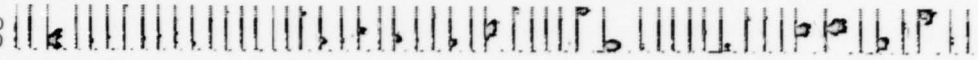
ALTITUDE 9.3 km

TEMPERATURE -42.8 °C

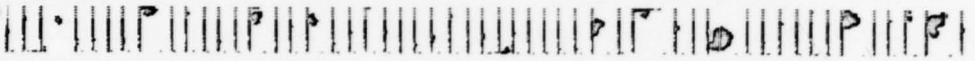
	SCATTER	PROBE CLOUD(C)	PRECIP(P)	C + P
ICE WATER CONTENT ($g\ m^{-3}$)	7.49×10^{-3}	1.61×10^{-2}	9.10×10^{-3}	2.52×10^{-2}
MED. VOL. DIAMETER (μm)	18	67	208	105

EXAMPLE 2-D PARTICLE FORMS

CLOUD 1837:30



CLOUD 1837:31



COMMENTS: Near the top of the cirrus layer. The IWC determined from the cloud probe is large, but the median size of 67 μm is relatively small. There is a smooth decrease of concentration with size.

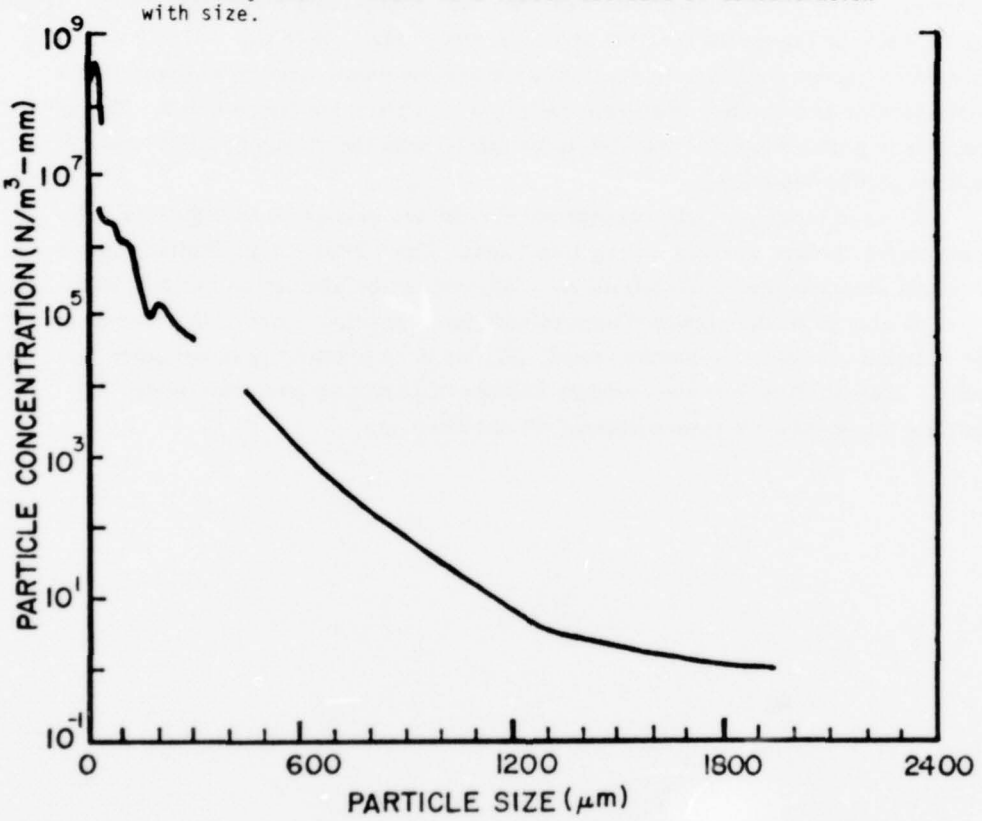


Figure 15. Particle Size Distribution for 19 March 1978; 1835-1838Z

5. CONCLUDING COMMENTS

This flight provided a look at two kinds of ice clouds, altostratus and cirrostratus, as well as a relatively clear area between them. The data showed a large difference in the type and size of particles from one cloud type to another. Particles in the lower clouds were relatively large with a variety of shapes, while the cirriform clouds had small, more regular shaped crystals. Higher in the altostratus, the crystal size decreased, although the change in ice water content was quite small. Within the cirrus, however, crystal size was nearly constant while IWC increased somewhat with altitude.

The sampling aircraft was in varying densities of cloud most of the time. However, there were two periods when particle populations were very small. These can be seen on Figure 10 starting at 1730Z and 1755Z. Both the 1-D and 2-D data showed an abrupt decrease in particle size and ice water content at these times. Particle size and number rose appreciably 5 min after the times noted. These changes in particle counts are also to be inferred in the changes in the total IWC vs time plot in Figure 11.

Averaged cloud particle concentration data are presented in Appendix C for consecutive 30-sec periods during this flight. The particle type (bullet rosette or small snow) in these tabulations was determined by examining the 2-D data.

One change to the standard data format from previous part of this series is the addition of a particle number total, NT, on each printout in Appendices B and C. The NT figure is the average number of particles per cubic meter for particle sizes between approximately 17 and 5400 μm.

Appendix A

Mission Director's Comments

The comments in this section have been transcribed from the voice tape recording made by Capt D. D. Cameron, the Mission Director aboard MC-130E S/N 640571 on 19 March 1978.

TIME (Z)	COMMENT
16:53:15	Flight level (FL) 121 (12,100 ft) and climbing. IAS 174 knots. Temperature = +1°C, dewpoint = -12°C. At haze layer, middle clouds to the right.
16:54:40	Getting crystals on the snow stick.
16:55:30	Flight level 150 (15,000 ft) in middle cloud and climbing to top. Ground barely visible. 0.5 mm small snow.
16:57:20	In clouds, still climbing. Temperature = -5°C. Flight level 171 (17,100 ft).
16:58:30	Looking brighter, but very gray a few miles south of Albuquerque. Flight level 184 (18,400 ft), 9 nm north of Socorro.
17:03:15	In continuous cloud. 0.4 mm small snow.
17:04:20	Brighter, but still in clouds.
17:07:35	Flight level 240 (24,000 ft), some icing.
17:08:30	Icing. Flight level 240 (24,000 ft). IAS 149 kt. In solid cloud.
17:09:30	Temporarily on top of one layer.
17:10:35	In clouds.
17:11:20	At the level of the tops of clouds.
17:13:30	In the clear, between layers.
17:19:30	500 ft below cirrus. Small snow, 0.3 mm. Wind 249 deg/29 kts.

TIME (Z)	COMMENT
17:20:50	At bases of cirrus. Bases lower to the south.
17:23:00	1000 ft below bases. Little data.
17:23:30	Cirrus thinner. No halo.
17:29:00	Flight level 275 (27,500 ft) and climbing. Temperature = -24°C. Cirrus is higher and thinner to the west.
17:31:00	Out of cloud.
17:32:25	In the clear.
17:37:35	Light cirrus. 0.1 mm sized particles.
17:37:55	Halo visible above.
17:39:30	Size and intensity has increased.
17:41:30	Climbing to flight level 290 (29,000 ft).
17:45:00	1000 ft below cirrus. Middle cloud below. Horizontal visibility 2 to 3 miles.
17:45:50	In cloud. Particles very small and uniform; less than 0.1 mm, occasional 0.2 mm.
17:48:30	Clouds thicker, some light icing.
17:49:00	Cannot see below or ahead.
17:50:35	In and out of tops.
17:52:30	Tops of cirrus, flight level 280 (28,000 ft).
18:00:30	Entering cloud. Gray sky above. Nice halo. IAS 150 kts. Temperature -27°C.
18:01:45	Blue sky occasionally visible above the gray.
18:02:25	1000 ft below tops. Sun off right wing. Position: 33° 10'N/106° 55'W.
18:04:00	At top of cirrus at flight level 290 (29,000 ft).
18:07:30	80 NM west of Roswell. In cirrus. Temperature -27°C.
18:08:15	Cirrus getting thicker. Good 0.1 mm size. Middle deck visible below.
18:09:20	Darker now, no halo.
18:09:30	Cannot see middle deck. Still 0.1 mm size. Good halo.
18:12:30	In the middle of a thinning cirrus deck.
18:14:00	Still good halo. Visibility 1 mi. Cannot see clouds below.
18:19:00	Still in cirrus.
18:28:00	IAS 150 kts. Flight level 299 (29,900 ft). Position: 33° 04'N/104° 55'W. 243/36 kts.
18:28:45	Still in cirrus. Good halo, bright sun.
18:31:25	Visibility 1 to 2 miles.
18:35:15	Larger particles; 0.3 to 0.4 mm. Flakes almost melt when they hit.
18:38:20	Just on top of the clouds. Flight level 300 (30,000 ft).
18:42:50	Halo above. Particles of sizes 0.2 to 0.6 mm.
18:44:00	Skimming through tops. Darker blue above.
18:45:00	End of transcription. Flight level 300. Position: 33° 52'N/105° 11'W.

Appendix B

Data for Specific Cases

Average particle distribution data from the 1-D PMS probe system are presented here for each of the five periods examined in Section 4 of this report. The data averaging interval is indicated on each of the listings.

Any of the normalized particle distribution figures in the Appendix, with units of N/m^3-mm, may be converted to unnormalized N/m^3 by multiplying by the following number of millimeters.

	Probe			
	Scatter	Cloud	Precipitation (except smallest size)	Precipitation (smallest size)
Small Snow	1.8×10^{-3}	2.3×10^{-2}	3.4×10^{-1}	2.1×10^{-1}
Bullet Rosettes	1.8×10^{-3}	2.0×10^{-2}	3.1×10^{-1}	2.3×10^{-1}

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 180 SECOND AVERAGING
INTERVAL START: *17:05:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

A.

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 394.3
2	2.18E+08	26	6.58E+04	465	2.52E+03	ALT (KM)
3	3.28E+09	49	1.08E+05	743	1.94E+03	7.284
5	1.04E+10	72	3.39E+03	1088	2.01E+02	
7	1.10E+10	95	2.41E+03	1433	1.61E+01	TEMP (C)
9	7.28E+09	118	7.42E+03	1778	1.76E+00	-28.8
11	4.95E+09	141	1.52E+03	2123	1.87E+00	
12	2.52E+09	164	1.77E+03	2468	1.32E+00	FROSTPOINT
14	9.53E+08	187	1.44E+03	2813	0.	-26.2
16	1.70E+08	210	2.34E+03	3158	0.	
18	2.64E+07	233	3.43E+03	3503	0.	TAS (M/S)
19	1.69E+07	256	1.71E+03	3848	0.	116.1
21	1.48E+07	279	1.52E+03	4193	0.	
23	1.23E+07	302	2.09E+03	4538	0.	NT (N/M3)
25	1.30E+07	325	2.87E+03	4883	0.	4574.9
27	1.89E+07	348	2.81E+03	5228	0.	
						TOTALS
IWC	2.72E-02		8.87E-04		1.53E-02	1.62E-02
MED D	10		151		302	298

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 150 SECOND AVERAGING
INTERVAL START: *17:17:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

B.

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 355.2
2	3.52E+08	26	1.12E+06	465	8.62E+02	ALT (KM)
3	1.16E+08	49	8.57E+05	743	7.51E+00	8.013
5	1.24E+08	72	2.65E+04	1088	1.01E-01	
7	9.91E+07	95	4.90E+04	1433	0.	TEMP (C)
9	7.43E+07	118	1.12E+05	1778	0.	-33.6
11	5.73E+07	141	5.00E+04	2123	0.	
12	3.69E+07	164	3.57E+04	2468	0.	FROSTPOINT
14	4.41E+07	187	1.80E+04	2813	0.	-35.2
16	2.94E+07	210	3.46E+04	3158	0.	
18	1.58E+07	233	2.51E+04	3503	0.	TAS (M/S)
19	1.20E+07	256	1.57E+04	3848	0.	120.6
21	9.50E+06	279	9.15E+03	4193	0.	
23	1.07E+07	302	8.99E+03	4538	0.	NT (N/M3)
25	8.73E+06	325	8.84E+03	4883	0.	29290.8
27	5.99E+06	348	6.03E+03	5228	0.	
						TOTALS
IWC	1.15E-03		6.09E-03		7.73E-04	6.86E-03
MED D	18		119		219	125

AFAL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 240 SECOND AVERAGING
INTERVAL START: *17:31:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

C.

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 321.5
2	2.53E+09	26	0.	465	0.	ALT (KM)
3	1.29E+07	49	0.	743	0.	8.694
5	0.	72	0.	1088	0.	
7	0.	95	0.	1433	0.	TEMP (C)
9	0.	118	0.	1778	0.	-39.0
11	0.	141	0.	2123	0.	
12	0.	164	0.	2468	0.	FROSTPOINT
14	0.	187	0.	2813	0.	-43.2
16	0.	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	124.4
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	0.0
27	0.	348	0.	5228	0.	
						TOTALS
IWC	2.28E-05		0.		0.	0.
MED D	2		0		0	0

AFAL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 300 SECOND AVERAGING
INTERVAL START: *18:13:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

D.

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.6
2	6.33E+08	25	9.02E+05	437	5.75E+03	ALT (KM)
3	3.46E+08	47	5.22E+05	706	1.14E+02	8.970
5	3.06E+08	67	9.66E+04	1011	4.01E+00	
7	2.39E+08	87	7.17E+04	1316	5.76E-02	TEMP (C)
9	1.68E+08	108	1.29E+05	1622	0.	-40.1
11	1.28E+08	128	6.39E+04	1927	0.	
12	7.90E+07	148	5.58E+04	2233	0.	FROSTPOINT
14	9.00E+07	169	3.38E+04	2538	0.	-39.8
16	6.73E+07	188	6.54E+04	2843	0.	
18	3.22E+07	209	7.30E+04	3149	0.	TAS (M/S)
19	2.76E+07	230	7.25E+04	3454	0.	125.0
21	2.04E+07	250	5.50E+04	3760	0.	
23	2.02E+07	271	5.17E+04	4065	0.	NT (N/M3)
25	1.80E+07	291	4.86E+04	4370	0.	29514.4
27	1.44E+07	311	3.51E+04	4676	0.	
						TOTALS
IWC	2.50E-03		6.38E-03		5.50E-03	1.25E-02
MED D	18		108		197	134

AFGL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 180 SECOND AVERAGING
INTERVAL START: *18:35:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

E.

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.5
2	2.28E+08	26	2.93E+06	437	8.00E+03	ALT (KM)
3	4.14E+08	47	2.03E+06	706	3.69E+02	9.307
5	7.17E+08	67	2.15E+06	1011	2.97E+01	
7	6.77E+08	87	1.04E+06	1316	2.27E+00	TEMP (C)
9	4.92E+08	108	1.25E+06	1622	4.97E-01	-42.8
11	3.73E+08	128	4.51E+05	1927	1.06E-01	
12	2.23E+08	148	2.56E+05	2233	0.	FROSTPOINT
14	2.82E+08	169	8.37E+04	2538	0.	-43.3
16	2.02E+08	189	1.41E+05	2843	0.	
18	9.98E+07	209	1.20E+05	3149	0.	TAS (M/S)
19	8.26E+07	230	9.19E+04	3454	0.	127.9
21	6.31E+07	250	5.54E+04	3760	0.	
23	6.36E+07	271	4.86E+04	4065	0.	NT (N/M3)
25	5.81E+07	291	4.27E+04	4370	0.	158646.6
27	4.13E+07	311	3.38E+04	4676	0.	
						TOTALS
IWC	7.49E-03		1.51E-02		9.10E-03	2.52E-02
MED D	18		67		208	105

Appendix C

30-Second Data Averages

Data averaged over consecutive 30-sec intervals from 1705Z to 1848Z are presented here. The predominant type of crystal used for water content calculations is either bullet rosette or small snow—as indicated on individual printouts.

The method of determining unnormalized particle densities from the normalized values in this section is described in the introduction to Appendix B

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:05:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 405.3
2	1.52E+08	26	3.30E+04	465	1.81E+03	ALT (KM)
3	5.41E+09	49	1.22E+05	743	3.22E+03	7.090
5	8.27E+09	72	1.23E+04	1088	2.78E+02	
7	5.49E+09	95	2.43E+03	1433	3.56E+01	TEMP (C)
9	2.45E+09	118	8.23E+03	1778	3.52E+00	-27.3
11	8.79E+08	141	1.22E+03	2123	3.11E+00	
12	3.09E+08	164	2.90E+03	2468	2.64E+00	FROSTPOINT
14	9.61E+07	187	2.38E+03	2813	0.	-24.7
16	4.26E+07	210	4.30E+03	3158	0.	
18	1.97E+07	233	5.62E+03	3503	0.	TAS (M/S)
19	1.79E+07	256	2.05E+03	3848	0.	115.4
21	1.20E+07	279	0.	4193	0.	
23	1.18E+07	302	6.76E+02	4538	0.	NT (N/M3)
25	9.70E+06	325	1.35E+03	4883	0.	5448.9
27	1.15E+07	348	1.42E+03	5228	0.	
						TOTALS
IWC	8.63E-03		7.29E-04		2.24E-02	2.32E-02
MED D	8		126		309	307

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:06:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 394.7
2	1.97E+08	26	3.30E+04	465	3.04E+03	ALT (KM)
3	2.55E+09	49	8.74E+04	743	1.76E+03	7.277
5	1.08E+10	72	0.	1088	5.02E+02	
7	1.27E+10	95	0.	1433	1.62E+01	TEMP (C)
9	8.98E+09	118	4.96E+03	1778	2.94E+00	-28.6
11	6.23E+09	141	1.23E+03	2123	1.87E+00	
12	3.03E+09	164	9.66E+02	2468	6.62E-01	FROSTPOINT
14	1.08E+09	187	7.96E+02	2813	0.	-26.0
16	1.60E+08	210	1.72E+03	3158	0.	
18	2.21E+07	233	0.	3503	0.	TAS (M/S)
19	1.27E+07	256	1.03E+03	3848	0.	115.0
21	1.12E+07	279	0.	4193	0.	
23	1.06E+07	302	2.00E+03	4538	0.	NT (N/M3)
25	9.71E+06	325	4.00E+03	4883	0.	3891.4
27	1.94E+07	348	3.42E+03	5228	0.	
						TOTALS
IWC	3.19E-02		7.54E-04		1.82E-02	1.99E-02
MED D	10		165		318	313

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:05:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 393.8
2	2.48E+08	26	9.97E+04	465	3.87E+03	ALT (KM)
3	4.67E+09	49	1.31E+05	743	2.78E+03	7.186
5	1.23E+10	72	0.	1088	2.53E+02	
7	1.00E+10	95	0.	1433	2.29E+01	TEMP (C)
9	5.95E+09	118	1.66E+04	1778	1.77E+00	-28.0
11	2.89E+09	141	0.	2123	3.12E+00	
12	1.11E+09	164	9.64E+02	2468	2.66E+00	FROSTPOINT
14	3.26E+08	187	0.	2813	0.	-25.6
16	7.09E+07	210	1.72E+03	3158	0.	
18	1.74E+07	233	6.57E+03	3503	0.	TAS (M/S)
19	1.77E+07	256	1.03E+03	3848	0.	115.1
21	1.33E+07	279	3.44E+03	4193	0.	
23	7.35E+06	302	3.97E+03	4538	0.	NT (N/M3)
25	8.54E+06	325	4.57E+03	4883	0.	5853.0
27	1.24E+07	348	4.45E+03	5228	0.	
						TOTALS
IWC	1.84E-02		1.29E-03		2.18E-02	2.31E-02
MED D	9		156		300	296

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:06:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 389.6
2	2.15E+08	26	9.95E+04	465	2.89E+03	ALT (KM)
3	2.15E+09	49	1.31E+05	743	2.79E+03	7.369
5	1.03E+10	72	4.12E+03	1088	1.43E+02	
7	1.35E+10	95	7.33E+03	1433	2.01E+01	TEMP (C)
9	9.67E+09	118	4.99E+03	1778	2.36E+00	-23.4
11	7.40E+09	141	3.68E+03	2123	3.12E+00	
12	3.98E+09	164	2.90E+03	2468	1.98E+00	FROSTPOINT
14	1.37E+09	187	7.98E+02	2813	0.	-26.5
16	2.16E+09	210	3.44E+03	3158	0.	
18	3.63E+07	233	5.65E+03	3503	0.	TAS (M/S)
19	2.33E+07	256	3.10E+03	3848	0.	114.8
21	1.95E+07	279	2.31E+03	4193	0.	
23	1.56E+07	302	2.61E+03	4538	0.	NT (N/M3)
25	1.95E+07	325	2.94E+03	4883	0.	5725.4
27	2.33E+07	348	2.94E+03	5228	0.	
						TOTALS
IWC	3.75E-02		1.11E-03		1.96E-02	2.07E-02
MED D	11		144		299	296

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:07:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 388.3
2	2.61E+08	26	6.55E+04	465	1.07E+03	ALT (KM)
3	2.28E+09	49	8.56E+04	743	3.33E+02	7.392
5	1.03E+10	72	0.	1088	9.97E+00	
7	1.27E+10	95	0.	1433	5.41E-01	TEMP (C)
9	8.89E+09	118	6.56E+03	1778	0.	-29.8
11	6.78E+09	141	2.42E+03	2123	0.	
12	3.47E+09	164	2.89E+03	2468	0.	FROSTPOINT
14	1.26E+09	187	2.35E+03	2813	0.	-27.4
16	1.72E+08	210	2.55E+03	3158	0.	
18	1.68E+07	233	9.06E+02	3503	0.	TAS (M/S)
19	1.07E+07	256	2.03E+03	3848	0.	117.1
21	1.16E+07	279	1.13E+03	4193	0.	
23	9.83E+06	302	1.48E+03	4538	0.	NT (N/M3)
25	1.50E+07	325	1.93E+03	4883	0.	2896.9
27	2.49E+07	348	1.76E+03	5228	0.	
						TOTALS
IWC	3.40E-02		6.60E-04		2.94E-03	3.60E-03
MED D	10		143		273	254

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:08:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 388.7
2	2.29E+08	26	1.96E+05	465	2.68E+03	ALT (KM)
3	2.36E+09	49	1.81E+05	743	6.41E+02	7.385
5	9.55E+09	72	4.00E+03	1088	3.74E+01	
7	1.10E+10	95	4.71E+03	1433	5.44E+00	TEMP (C)
9	7.15E+09	118	4.86E+03	1778	0.	-29.6
11	5.10E+09	141	0.	2123	0.	
12	3.26E+09	164	4.77E+03	2468	0.	FROSTPOINT
14	2.14E+09	187	7.67E+02	2813	0.	-26.8
16	6.94E+08	210	5.06E+03	3158	0.	
18	8.38E+07	233	3.70E+03	3503	0.	TAS (M/S)
19	3.42E+07	256	0.	3848	0.	117.1
21	2.96E+07	279	3.37E+03	4193	0.	
23	3.01E+07	302	4.31E+03	4538	0.	NT (N/M3)
25	3.10E+07	325	5.51E+03	4883	0.	5969.7
27	4.27E+07	348	4.90E+03	5228	0.	
						TOTALS
IWC	3.57E-02		1.41E-03		6.55E-03	7.96E-03
MED D	11		157		268	248

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:07:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 388.3
2	2.37E+08	26	6.44E+04	465	1.65E+03	ALT (KM)
3	2.58E+09	49	9.27E+04	743	7.68E+02	7.392
5	1.02E+10	72	3.95E+03	1088	1.70E+01	
7	1.16E+10	95	4.71E+03	1433	1.09E+00	TEMP (C)
9	7.73E+09	118	3.24E+03	1778	0.	-29.7
11	5.54E+09	141	2.38E+03	2123	0.	
12	3.23E+09	164	0.	2468	0.	FROSTPOINT
14	1.65E+09	187	2.31E+03	2813	0.	-27.0
16	3.61E+08	210	3.32E+03	3158	0.	
18	4.62E+07	233	1.82E+03	3503	0.	TAS (M/S)
19	1.91E+07	256	1.00E+03	3848	0.	118.8
21	2.11E+07	279	2.23E+03	4193	0.	
23	1.88E+07	302	2.32E+03	4538	0.	NT (N/M3)
25	1.57E+07	325	2.41E+03	4883	0.	3463.9
27	2.17E+07	348	2.27E+03	5228	0.	
						TOTALS
IWC	3.30E-02		7.84E-04		5.87E-03	6.65E-03
MED D	11		152		283	273

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:08:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 389.0
2	2.73E+08	26	1.33E+05	465	1.58E+03	ALT (KM)
3	3.39E+09	49	1.23E+05	743	2.38E+02	7.379
5	1.32E+10	72	0.	1088	6.37E+00	
7	1.41E+10	95	0.	1433	5.58E-01	TEMP (C)
9	9.39E+09	118	1.65E+03	1778	0.	-29.5
11	4.76E+09	141	2.47E+03	2123	0.	
12	2.03E+09	164	5.83E+03	2468	0.	FROSTPOINT
14	1.19E+09	187	1.59E+03	2813	0.	-27.3
16	4.68E+08	210	0.	3158	0.	
18	5.43E+07	233	6.61E+03	3503	0.	TAS (M/S)
19	1.51E+07	256	4.16E+03	3848	0.	114.5
21	1.33E+07	279	1.15E+03	4193	0.	
23	1.48E+07	302	2.17E+03	4538	0.	NT (N/M3)
25	1.33E+07	325	4.07E+03	4883	0.	3967.3
27	2.36E+07	348	3.49E+03	5228	0.	
						TOTALS
IWC	3.14E-02		1.11E-03		2.89E-03	4.01E-03
MED D	10		150		246	221

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:09:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 388.9
2	2.64E+08	26	1.68E+05	465	7.70E+02	ALT (KM)
3	4.29E+09	49	1.15E+05	743	2.15E+01	7.381
5	1.27E+10	72	4.15E+03	1088	0.	
7	1.22E+10	95	4.96E+03	1433	0.	TEMP (C)
9	7.62E+09	118	6.71E+03	1778	0.	-29.4
11	3.58E+09	141	1.24E+03	2123	0.	
12	8.78E+08	164	1.96E+03	2468	0.	FROSTPOINT
14	1.02E+08	187	1.63E+03	2813	0.	-27.0
16	1.92E+07	210	4.38E+03	3158	0.	
18	5.68E+06	233	2.86E+03	3503	0.	TAS (M/S)
19	5.40E+06	256	3.17E+03	3848	0.	113.1
21	5.09E+06	279	3.52E+03	4193	0.	
23	3.89E+06	302	4.01E+03	4538	0.	NT (N/M3)
25	4.49E+06	325	4.56E+03	4883	0.	3858.9
27	5.09E+06	348	3.41E+03	5228	0.	
						TOTALS
IWC	1.96E-02		1.26E-03		8.19E-04	2.08E-03
MED D	9		153		222	170

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:10:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 389.6
2	2.89E+08	26	0.	465	9.49E+02	ALT (KM)
3	4.79E+09	49	1.25E+05	743	0.	7.369
5	7.04E+09	72	0.	1088	0.	
7	5.19E+09	95	2.48E+03	1433	0.	TEMP (C)
9	2.42E+09	118	3.38E+03	1778	0.	-29.1
11	1.46E+09	141	0.	2123	0.	
12	4.99E+08	164	2.97E+03	2468	0.	FROSTPOINT
14	5.85E+07	187	1.62E+03	2813	0.	-26.7
16	7.21E+06	210	7.03E+03	3158	0.	
18	2.40E+06	233	7.65E+03	3503	0.	TAS (M/S)
19	2.40E+06	256	1.05E+03	3848	0.	112.8
21	6.02E+05	279	0.	4193	0.	
23	1.50E+06	302	9.49E+02	4538	0.	NT (N/M3)
25	6.02E+05	325	1.90E+03	4883	0.	3747.7
27	2.41E+06	348	1.69E+03	5228	0.	
						TOTALS
IWC	8.35E-03		7.91E-04		9.38E-04	1.73E-03
MED D	9		127		217	185

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:09:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 389.7
2	2.30E+07	26	0.	465	5.16E+02	ALT (KM)
3	8.16E+06	49	6.28E+04	743	0.	7.367
5	1.42E+07	72	4.20E+03	1088	0.	
7	9.07E+06	95	0.	1433	0.	TEMP (C)
9	8.16E+06	118	0.	1778	0.	-28.8
11	3.63E+06	141	0.	2123	0.	
12	2.72E+06	164	0.	2468	0.	FROSTPOINT
14	2.12E+06	187	8.18E+02	2813	0.	-26.6
16	2.42E+06	210	8.83E+02	3158	0.	
18	1.21E+06	233	9.60E+02	3503	0.	TAS (M/S)
19	6.05E+05	256	7.42E+03	3848	0.	112.0
21	1.21E+06	279	2.35E+03	4193	0.	
23	1.51E+06	302	1.56E+03	4538	0.	NT (N/M3)
25	0.	325	1.03E+03	4883	0.	2001.6
27	6.05E+05	348	9.22E+02	5228	0.	
						TOTALS
IWC	9.06E-05		6.18E-04		5.13E-04	1.13E-03
MED D	19		141		217	171

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:10:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 389.4
2	2.76E+08	26	1.68E+05	465	7.13E+02	ALT (KM)
3	5.12E+09	49	5.33E+04	743	9.55E+01	7.372
5	1.13E+10	72	0.	1088	0.	
7	1.15E+10	95	2.50E+03	1433	0.	TEMP (C)
9	7.17E+09	118	1.70E+03	1778	0.	-29.4
11	5.43E+09	141	0.	2123	0.	
12	2.95E+09	164	1.96E+03	2468	0.	FROSTPOINT
14	8.22E+08	187	2.43E+03	2813	0.	-26.9
16	6.17E+07	210	4.38E+03	3158	0.	
18	8.39E+06	233	4.77E+03	3503	0.	TAS (M/S)
19	5.39E+06	256	2.10E+03	3848	0.	113.1
21	8.09E+06	279	1.17E+03	4193	0.	
23	5.70E+06	302	1.51E+03	4538	0.	NT (N/M3)
25	9.88E+06	325	1.95E+03	4883	0.	1992.8
27	1.53E+07	348	1.66E+03	5228	0.	
						TOTALS
IWC	2.78E-02		7.41E-04		1.20E-03	1.94E-03
MED D	10		136		242	203

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:11:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 389.2
2	2.29E+08	26	1.00E+05	465	7.01E+02	ALT (KM)
3	5.09E+09	49	1.49E+05	743	6.09E+00	7.375
5	7.28E+09	72	0.	1088	0.	
7	4.82E+09	95	2.45E+03	1433	0.	TEMP (C)
9	2.63E+09	118	1.66E+03	1778	0.	-29.2
11	1.15E+09	141	3.71E+03	2123	0.	
12	3.27E+08	164	9.71E+02	2468	0.	FROSTPOINT
14	6.01E+07	187	0.	2813	0.	-26.9
16	2.55E+07	210	5.20E+03	3158	0.	
18	1.30E+07	233	1.89E+03	3503	0.	TAS (M/S)
19	9.48E+06	256	4.15E+03	3848	0.	114.4
21	6.51E+06	279	3.46E+03	4193	0.	
23	7.11E+06	302	4.96E+03	4538	0.	NT (N/M3)
25	4.44E+06	325	7.09E+03	4883	0.	4464.0
27	3.85E+06	348	4.85E+03	5228	0.	
						TOTALS
INC	8.09E-03		1.51E-03		6.26E-04	2.13E-03
MED D	8		159		219	167

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:12:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 388.8
2	2.01E+08	26	0.	465	0.	ALT (KM)
3	2.33E+09	49	1.73E+04	743	0.	7.383
5	2.81E+09	72	0.	1088	0.	
7	1.56E+09	95	0.	1433	0.	TEMP (C)
9	5.13E+08	118	1.64E+03	1778	0.	-28.8
11	1.70E+08	141	0.	2123	0.	
12	5.27E+07	164	9.71E+02	2468	0.	FROSTPOINT
14	1.40E+07	187	0.	2813	0.	-26.8
16	9.34E+06	210	0.	3158	0.	
18	8.76E+05	233	0.	3503	0.	TAS (M/S)
19	1.17E+06	256	0.	3848	0.	115.7
21	2.89E+05	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	457.4
27	0.	348	0.	5228	0.	
						TOTALS
INC	2.00E-03		3.10E-05		0.	3.10E-05
MED D	7		75		0	75

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:11:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 389.2
2	1.62E+07	26	0.	465	3.82E+03	ALT (KM)
3	3.62E+07	49	1.65E+05	743	0.	7.375
5	4.91E+07	72	0.	1088	0.	
7	4.47E+07	95	4.86E+03	1433	0.	TEMP (C)
9	3.44E+07	118	4.97E+03	1778	0.	-29.7
11	2.53E+07	141	3.68E+03	2123	0.	
12	1.32E+07	164	1.93E+03	2468	0.	FROSTPOINT
14	1.85E+07	187	0.	2813	0.	-26.5
16	1.29E+07	210	6.87E+03	3158	0.	
18	7.06E+06	233	1.87E+03	3503	0.	TAS (M/S)
19	3.82E+06	256	5.15E+03	3848	0.	115.3
21	5.00E+06	279	5.72E+03	4193	0.	
23	6.17E+06	302	6.61E+03	4538	0.	NT (N/M3)
25	3.53E+06	325	7.64E+03	4883	0.	5798.3
27	1.47E+06	348	6.82E+03	5228	0.	
						TOTALS
INC	4.87E-04		1.94E-03		3.80E-03	5.73E-03
MED D	18		158		217	198

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:12:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 388.6
2	4.10E+08	26	0.	465	0.	ALT (KM)
3	2.05E+09	49	0.	743	0.	7.387
5	1.67E+09	72	0.	1088	0.	
7	4.92E+08	95	0.	1433	0.	TEMP (C)
9	1.28E+08	118	1.64E+03	1778	0.	-28.7
11	1.28E+07	141	0.	2123	0.	
12	5.24E+06	164	0.	2468	0.	FROSTPOINT
14	0.	187	0.	2813	0.	-26.9
16	8.76E+05	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	116.0
21	0.	279	0.	4193	0.	
23	5.85E+05	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	37.7
27	0.	348	0.	5228	0.	
						TOTALS
INC	7.21E-04		8.50E-06		0.	8.50E-06
MED D	6		75		0	75

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:13:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 387.9
2	4.70E+08	26	0.	465	0.	ALT (KM)
3	2.92E+05	49	0.	743	0.	7.398
5	0.	72	0.	1088	0.	
7	0.	95	0.	1433	0.	TEMP (C)
9	0.	118	0.	1778	0.	-28.4
11	0.	141	0.	2123	0.	
12	0.	164	0.	2468	0.	FROSTPOINT
14	0.	187	0.	2813	0.	-27.5
16	0.	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	117.5
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	0.0
27	0.	348	0.	5228	0.	
						TOTALS
IWC	4.11E-06		0.		0.	0.
MED D	2		0		0	0

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:14:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 378.2
2	5.51E+08	26	0.	465	0.	ALT (KM)
3	0.	49	0.	743	0.	7.577
5	0.	72	0.	1088	0.	
7	0.	95	0.	1433	0.	TEMP (C)
9	0.	118	0.	1778	0.	-29.8
11	0.	141	0.	2123	0.	
12	0.	164	0.	2468	0.	FROSTPOINT
14	0.	187	0.	2813	0.	-30.4
16	0.	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	116.5
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	0.0
27	0.	348	0.	5228	0.	
						TOTALS
IWC	4.80E-06		0.		0.	0.
MED D	2		0		0	0

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:13:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 384.1
2	5.31E+08	26	0.	465	0.	ALT (KM)
3	0.	49	0.	743	0.	7.469
5	2.90E+05	72	0.	1088	0.	
7	0.	95	0.	1433	0.	TEMP (C)
9	0.	118	0.	1778	0.	-29.0
11	0.	141	0.	2123	0.	
12	0.	164	0.	2468	0.	FROSTPOINT
14	0.	187	0.	2813	0.	-29.3
16	0.	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	117.5
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	0.0
27	0.	348	0.	5228	0.	
						TOTALS
IWC	4.68E-06		0.		0.	0.
MED D	2		0		0	0

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:14:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 374.1
2	6.14E+08	26	0.	465	0.	ALT (KM)
3	0.	49	0.	743	0.	7.652
5	0.	72	0.	1088	0.	
7	2.93E+05	95	0.	1433	0.	TEMP (C)
9	0.	118	0.	1778	0.	-30.4
11	0.	141	0.	2123	0.	
12	0.	164	0.	2468	0.	FROSTPOINT
14	0.	187	0.	2813	0.	-33.1
16	0.	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	117.2
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	0.0
27	0.	348	0.	5228	0.	
						TOTALS
IWC	5.46E-06		0.		0.	0.
MED D	2		0		0	0

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:15:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 370.2
2	6.93E+08	26	0.	465	0.	ALT (KM)
3	0.	49	0.	743	0.	7.725
5	0.	72	0.	1088	0.	
7	0.	95	0.	1433	0.	TEMP (C)
9	0.	118	0.	1778	0.	-31.0
11	2.88E+05	141	0.	2123	0.	
12	0.	164	0.	2468	0.	FROSTPOINT
14	0.	187	0.	2813	0.	-33.8
16	0.	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	118.0
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	0.0
27	0.	348	0.	5228	0.	
						TOTALS
IWC	6.40E-06		0.		0.	0.
MED D	2		0		0	0

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:16:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 362.5
2	2.25E+08	26	9.05E+05	465	1.12E+03	ALT (KM)
3	7.01E+07	49	3.57E+05	743	0.	7.871
5	5.28E+07	72	7.98E+03	1088	0.	
7	4.80E+07	95	3.09E+04	1433	0.	TEMP (C)
9	3.53E+07	118	8.40E+04	1778	0.	-32.3
11	2.81E+07	141	3.47E+04	2123	0.	
12	1.69E+07	164	2.26E+04	2468	0.	FROSTPOINT
14	1.55E+07	187	6.22E+03	2813	0.	-34.9
16	1.38E+07	210	8.39E+03	3158	0.	
18	6.03E+06	233	4.58E+03	3503	0.	TAS (M/S)
19	6.03E+06	256	2.01E+03	3848	0.	118.0
21	5.17E+06	279	1.12E+03	4193	0.	
23	2.01E+06	302	1.58E+03	4538	0.	NT (N/M3)
25	4.31E+06	325	2.24E+03	4883	0.	13215.2
27	2.30E+06	348	2.00E+03	5228	0.	
						TOTALS
IWC	4.88E-04		2.26E-03		1.10E-03	3.36E-03
MED D	18		89		217	121

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:15:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 366.0
2	8.05E+08	26	0.	465	1.01E+02	ALT (KM)
3	6.34E+06	49	3.43E+04	743	4.93E-01	7.805
5	3.46E+06	72	0.	1088	0.	
7	6.35E+06	95	2.40E+03	1433	0.	TEMP (C)
9	3.46E+06	118	4.88E+03	1778	0.	-31.6
11	2.88E+06	141	6.01E+03	2123	0.	
12	1.44E+06	164	1.90E+03	2468	0.	FROSTPOINT
14	5.76E+05	187	1.56E+03	2813	0.	-31.6
16	1.15E+06	210	8.43E+02	3158	0.	
18	1.44E+06	233	0.	3503	0.	TAS (M/S)
19	8.65E+05	256	0.	3848	0.	117.7
21	2.88E+05	279	0.	4193	0.	
23	2.89E+05	302	4.22E+02	4538	0.	NT (N/M3)
25	5.76E+05	325	8.44E+02	4883	0.	1247.3
27	2.88E+05	348	5.96E+02	5228	0.	
						TOTALS
IWC	6.04E-05		2.65E-04		7.33E-05	3.38E-04
MED D	18		106		218	154

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:16:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 358.9
2	3.29E+08	26	7.41E+05	465	1.63E+03	ALT (KM)
3	7.36E+07	49	6.19E+05	743	0.	7.940
5	5.53E+07	72	1.99E+04	1088	0.	
7	5.19E+07	95	4.98E+04	1433	0.	TEMP (C)
9	3.09E+07	118	7.74E+04	1778	0.	-32.8
11	3.32E+07	141	3.34E+04	2123	0.	
12	2.06E+07	164	3.01E+04	2468	0.	FROSTPOINT
14	1.83E+07	187	1.32E+04	2813	0.	-35.8
16	1.32E+07	210	1.51E+04	3158	0.	
18	6.30E+06	233	1.09E+04	3503	0.	TAS (M/S)
19	8.02E+06	256	1.00E+04	3848	0.	118.2
21	4.58E+06	279	0.	4193	0.	
23	3.44E+06	302	1.63E+03	4538	0.	NT (N/M3)
25	4.87E+06	325	3.27E+03	4883	0.	20702.1
27	4.58E+06	348	2.92E+03	5228	0.	
						TOTALS
IWC	5.86E-04		3.26E-03		1.62E-03	4.88E-03
MED D	19		100		217	131

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:17:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 355.1
2	1.74E+08	26	1.81E+06	465	3.53E+02	ALT (KM)
3	1.40E+08	49	1.19E+06	743	4.89E-01	8.014
5	1.28E+08	72	4.38E+04	1088	0.	
7	1.13E+08	95	6.65E+04	1433	0.	TEMP (C)
9	8.27E+07	118	1.79E+05	1778	0.	-33.5
11	5.57E+07	141	7.90E+04	2123	0.	
12	3.82E+07	164	4.23E+04	2468	0.	FROSTPOINT
14	3.56E+07	187	2.33E+04	2813	0.	-35.0
16	3.44E+07	210	3.44E+04	3158	0.	
18	1.90E+07	233	2.11E+04	3503	0.	TAS (M/S)
19	1.41E+07	256	1.71E+04	3848	0.	118.0
21	1.03E+07	279	8.97E+03	4193	0.	
23	1.26E+07	302	7.06E+03	4538	0.	NT (N/M3)
25	1.03E+07	325	5.56E+03	4883	0.	39627.8
27	5.17E+06	348	3.54E+03	5228	0.	
						TOTALS
IWC	1.24E-03		6.68E-03		2.36E-04	6.92E-03
MED D	18		101		217	105

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:18:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 355.0
2	2.64E+08	26	6.59E+05	465	4.86E+02	ALT (KM)
3	1.13E+08	49	6.85E+05	743	2.39E+00	8.017
5	1.05E+08	72	1.93E+04	1088	0.	
7	8.11E+07	95	3.92E+04	1433	0.	TEMP (C)
9	6.02E+07	118	7.84E+04	1778	0.	-33.7
11	4.65E+07	141	2.67E+04	2123	0.	
12	2.79E+07	164	2.47E+04	2468	0.	FROSTPOINT
14	3.26E+07	187	1.21E+04	2813	0.	-35.2
16	1.95E+07	210	2.44E+04	3158	0.	
18	1.00E+07	233	1.69E+04	3503	0.	TAS (M/S)
19	8.91E+06	256	1.56E+04	3848	0.	121.5
21	6.96E+06	279	8.69E+03	4193	0.	
23	8.91E+06	302	7.18E+03	4538	0.	NT (N/M3)
25	5.57E+06	325	5.94E+03	4883	0.	22333.5
27	4.45E+06	348	3.94E+03	5228	0.	
						TOTALS
IWC	8.51E-04		4.44E-03		3.97E-04	4.83E-03
MED D	18		122		218	126

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:17:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 354.9
2	1.98E+07	26	2.98E+06	465	1.96E+03	ALT (KM)
3	2.22E+08	49	2.21E+06	743	1.43E+01	8.018
5	3.06E+08	72	8.92E+04	1088	0.	
7	2.61E+08	95	1.50E+05	1433	0.	TEMP (C)
9	1.88E+08	118	2.99E+05	1778	0.	-33.7
11	1.50E+08	141	1.28E+05	2123	0.	
12	9.55E+07	164	9.95E+04	2468	0.	FROSTPOINT
14	1.03E+08	187	4.82E+04	2813	0.	-34.7
16	7.79E+07	210	9.42E+04	3158	0.	
18	4.03E+07	233	7.26E+04	3503	0.	TAS (M/S)
19	3.34E+07	256	4.68E+04	3848	0.	121.7
21	2.78E+07	279	2.06E+04	4193	0.	
23	2.84E+07	302	2.15E+04	4538	0.	NT (N/M3)
25	2.33E+07	325	2.26E+04	4883	0.	76498.1
27	1.59E+07	348	1.51E+04	5228	0.	
						TOTALS
IWC	3.02E-03		1.61E-02		1.75E-03	1.79E-02
MED D	18		119		218	123

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:18:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 355.1
2	5.23E+08	26	5.06E+05	465	6.80E+02	ALT (KM)
3	9.39E+07	49	5.33E+05	743	1.30E+01	8.014
5	8.61E+07	72	3.91E+03	1088	5.07E-01	
7	5.96E+07	95	2.09E+04	1433	0.	TEMP (C)
9	4.92E+07	118	6.48E+04	1778	0.	-33.6
11	3.74E+07	141	2.93E+04	2123	0.	
12	2.05E+07	164	1.94E+04	2468	0.	FROSTPOINT
14	3.06E+07	187	1.14E+04	2813	0.	-36.0
16	1.94E+07	210	1.64E+04	3158	0.	
18	1.29E+07	233	1.52E+04	3503	0.	TAS (M/S)
19	9.00E+06	256	6.90E+03	3848	0.	120.6
21	5.34E+06	279	8.76E+03	4193	0.	
23	7.31E+06	302	6.50E+03	4538	0.	NT (N/M3)
25	2.81E+06	325	4.81E+03	4883	0.	17242.3
27	3.65E+06	348	3.49E+03	5228	0.	
						TOTALS
IWC	7.26E-04		3.52E-03		6.81E-04	4.20E-03
MED D	17		122		221	131

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:19:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 355.4
2	5.07E+08	26	6.04E+05	465	3.89E+02	ALT (KM)
3	6.12E+07	49	3.34E+05	743	1.93E+00	8.009
5	5.45E+07	72	0.	1088	0.	
7	4.15E+07	95	1.87E+04	1433	0.	TEMP (C)
9	3.08E+07	118	5.40E+04	1778	0.	-33.6
11	2.31E+07	141	2.35E+04	2123	0.	
12	1.69E+07	164	1.58E+04	2468	0.	FROSTPOINT
14	1.52E+07	187	7.64E+03	2813	0.	-35.4
16	1.13E+07	210	1.65E+04	3158	0.	
18	6.78E+06	233	4.50E+03	3503	0.	TAS (M/S)
19	3.39E+06	256	5.95E+03	3848	0.	120.1
21	3.96E+06	279	3.30E+03	4193	0.	
23	5.93E+06	302	3.88E+03	4538	0.	NT (N/M3)
25	5.65E+06	325	4.67E+03	4883	0.	11453.4
27	1.98E+06	348	3.05E+03	5228	0.	
						TOTALS
IWC	5.02E-04		2.51E-03		3.14E-04	2.82E-03
MED D	19		116		218	121

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:20:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 355.5
2	8.31E+08	26	3.21E+05	465	2.58E+02	ALT (KM)
3	4.39E+07	49	2.79E+05	743	2.44E+00	8.005
5	3.08E+07	72	3.95E+03	1088	0.	
7	2.45E+07	95	9.44E+03	1433	0.	TEMP (C)
9	2.39E+07	118	1.76E+04	1778	0.	-33.5
11	1.62E+07	141	7.12E+03	2123	0.	
12	9.98E+06	164	4.67E+03	2468	0.	FROSTPOINT
14	1.17E+07	187	8.47E+03	2813	0.	-35.1
16	8.26E+06	210	7.48E+03	3158	0.	
18	4.28E+06	233	5.45E+03	3503	0.	TAS (M/S)
19	2.28E+06	256	4.00E+03	3848	0.	118.6
21	1.71E+06	279	2.22E+03	4193	0.	
23	2.28E+06	302	2.25E+03	4538	0.	NT (N/M3)
25	3.13E+06	325	2.28E+03	4883	0.	8203.9
27	1.84E+06	348	1.59E+03	5228	0.	
						TOTALS
IWC	3.02E-04		1.43E-03		2.24E-04	1.65E-03
MED D	17		120		219	128

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:19:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 355.5
2	4.45E+08	26	8.33E+05	465	6.39E+02	ALT (KM)
3	8.72E+07	49	5.74E+05	743	5.86E+00	8.007
5	6.92E+07	72	1.98E+04	1088	0.	
7	5.24E+07	95	1.65E+04	1433	0.	TEMP (C)
9	4.33E+07	118	6.25E+04	1778	0.	-33.6
11	3.25E+07	141	4.28E+04	2123	0.	
12	2.36E+07	164	2.43E+04	2468	0.	FROSTPOINT
14	2.36E+07	187	1.08E+04	2813	0.	-34.6
16	1.91E+07	210	2.16E+04	3158	0.	
18	9.11E+06	233	1.63E+04	3503	0.	TAS (M/S)
19	5.41E+06	256	7.98E+03	3848	0.	119.0
21	3.41E+06	279	4.43E+03	4193	0.	
23	3.13E+06	302	5.27E+03	4538	0.	NT (N/M3)
25	6.27E+06	325	6.28E+03	4883	0.	18877.3
27	3.95E+06	348	4.32E+03	5228	0.	
						TOTALS
IWC	6.35E-04		3.82E-03		5.71E-04	4.39E-03
MED D	17		118		219	124

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:20:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 355.4
2	1.24E+09	26	0.	465	3.05E-01	ALT (KM)
3	5.11E+06	49	2.53E+04	743	4.87E-01	8.008
5	2.84E+06	72	0.	1088	0.	
7	6.26E+06	95	0.	1433	0.	TEMP (C)
9	3.69E+06	118	6.38E+03	1778	0.	-33.4
11	1.99E+06	141	1.19E+03	2123	0.	
12	1.98E+06	164	1.87E+03	2468	0.	FROSTPOINT
14	5.69E+05	187	7.69E+02	2813	0.	-36.1
16	5.67E+05	210	0.	3158	0.	
18	5.67E+05	233	0.	3503	0.	TAS (M/S)
19	2.83E+05	256	0.	3848	0.	118.8
21	8.52E+05	279	0.	4193	0.	
23	2.84E+05	302	0.	4538	0.	NT (N/M3)
25	2.85E+05	325	0.	4883	0.	816.1
27	0.	348	0.	5228	0.	
						TOTALS
IWC	4.81E-05		9.19E-05		2.95E-06	9.49E-05
MED D	14		79		293	80

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:21:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 355.2
2	8.40E+08	26	2.22E+05	465	2.42E+02	ALT (KM)
3	3.24E+07	49	1.92E+05	743	6.76E+00	8.012
5	2.20E+07	72	0.	1088	0.	
7	2.42E+07	95	2.32E+03	1433	0.	TEMP (C)
9	1.75E+07	118	3.01E+04	1778	0.	-33.3
11	1.18E+07	141	7.04E+03	2123	0.	
12	1.27E+07	164	5.54E+03	2468	0.	FROSTPOINT
14	9.31E+06	187	5.34E+03	2813	0.	-36.3
16	7.06E+06	210	5.75E+03	3158	0.	
18	3.10E+06	233	8.09E+03	3503	0.	TAS (M/S)
19	3.95E+06	256	5.93E+03	3848	0.	119.9
21	2.25E+06	279	2.21E+03	4193	0.	
23	1.98E+06	302	1.74E+03	4538	0.	NT (N/M3)
25	2.26E+06	325	1.37E+03	4883	0.	6212.6
27	8.49E+05	348	1.03E+03	5228	0.	
						TOTALS
IWC	2.72E-04		1.34E-03		2.53E-04	1.59E-03
MED D	17		124		222	130

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:22:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 355.5
2	1.33E+09	26	0.	465	0.	ALT (KM)
3	1.98E+06	49	0.	743	0.	8.007
5	1.13E+06	72	0.	1088	0.	
7	5.65E+05	95	0.	1433	0.	TEMP (C)
9	1.13E+06	118	1.59E+03	1778	0.	-33.1
11	2.82E+05	141	0.	2123	0.	
12	2.84E+05	164	0.	2468	0.	FROSTPOINT
14	2.82E+05	187	0.	2813	0.	-37.2
16	1.13E+06	210	1.65E+03	3158	0.	
18	2.84E+05	233	0.	3503	0.	TAS (M/S)
19	0.	256	9.90E+02	3848	0.	119.6
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	97.3
27	2.82E+05	348	0.	5228	0.	
						TOTALS
IWC	2.61E-05		7.25E-05		0.	7.25E-05
MED D	10		121		0	121

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:21:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 355.3
2	1.36E+09	26	0.	465	4.84E+02	ALT (KM)
3	5.69E+06	49	2.53E+04	743	0.	8.009
5	1.99E+06	72	0.	1088	0.	
7	4.55E+06	95	2.36E+03	1433	0.	TEMP (C)
9	2.84E+06	118	1.60E+03	1778	0.	-33.2
11	2.27E+06	141	1.19E+03	2123	0.	
12	1.71E+06	164	9.34E+02	2468	0.	FROSTPOINT
14	2.84E+05	187	1.54E+03	2813	0.	-35.9
16	5.69E+05	210	1.66E+03	3158	0.	
18	0.	233	2.72E+03	3503	0.	TAS (M/S)
19	2.85E+05	256	0.	3848	0.	119.2
21	5.68E+05	279	0.	4193	0.	
23	0.	302	4.84E+02	4538	0.	NT (N/M3)
25	0.	325	9.69E+02	4883	0.	999.7
27	0.	348	8.66E+02	5228	0.	
						TOTALS
IWC	3.32E-05		3.10E-04		4.82E-04	7.91E-04
MED D	10		129		217	193

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:22:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 355.4
2	1.54E+09	26	0.	465	0.	ALT (KM)
3	0.	49	8.38E+03	743	0.	8.007
5	2.84E+05	72	0.	1088	0.	
7	2.81E+05	95	0.	1433	0.	TEMP (C)
9	2.84E+05	118	0.	1778	0.	-33.1
11	0.	141	0.	2123	0.	
12	5.62E+05	164	9.28E+02	2468	0.	FROSTPOINT
14	0.	187	0.	2813	0.	-38.6
16	0.	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	119.4
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	214.1
27	0.	348	0.	5228	0.	
						TOTALS
IWC	1.49E-05		1.60E-05		0.	1.60E-05
MED D	2		94		0	94

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:23:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 355.3
2	1.60E+09	26	0.	465	0.	ALT (KM)
3	5.69E+05	49	1.68E+04	743	0.	8.009
5	0.	72	0.	1088	0.	
7	0.	95	0.	1433	0.	TEMP (C)
9	0.	118	1.60E+03	1778	0.	-33.1
11	2.84E+05	141	1.18E+03	2123	0.	
12	0.	164	0.	2468	0.	FROSTPOINT
14	0.	187	0.	2813	0.	-39.5
16	0.	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	119.1
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	450.5
27	0.	348	0.	5228	0.	
						TOTALS
IWC	1.44E-05		2.88E-05		0.	2.88E-05
MED D	2		74		0	74

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:24:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 355.4
2	1.56E+09	26	3.18E+04	465	3.05E-01	ALT (KM)
3	4.82E+06	49	4.20E+04	743	4.87E-01	8.009
5	3.97E+06	72	3.92E+03	1088	0.	
7	4.25E+06	95	4.70E+03	1433	0.	TEMP (C)
9	1.13E+06	118	3.17E+03	1778	0.	-33.1
11	1.98E+06	141	0.	2123	0.	
12	1.70E+06	164	1.86E+03	2468	0.	FROSTPOINT
14	1.98E+06	187	7.69E+02	2813	0.	-39.4
16	5.66E+05	210	8.30E+02	3158	0.	
18	5.67E+05	233	0.	3503	0.	TAS (M/S)
19	8.50E+05	256	0.	3848	0.	119.6
21	8.50E+05	279	0.	4193	0.	
23	2.82E+05	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	1316.6
27	0.	348	0.	5228	0.	
						TOTALS
IWC	5.19E-05		1.20E-04		2.95E-06	1.23E-04
MED D	14		73		293	74

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:23:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 355.3
2	1.40E+09	26	9.59E+04	465	9.14E-01	ALT (KM)
3	8.23E+06	49	3.37E+04	743	1.46E+00	8.010
5	4.54E+06	72	3.95E+03	1088	0.	
7	5.96E+06	95	0.	1433	0.	TEMP (C)
9	2.27E+06	118	3.20E+03	1778	0.	-33.1
11	2.84E+06	141	1.18E+03	2123	0.	
12	1.99E+06	164	9.32E+02	2468	0.	FROSTPOINT
14	1.70E+06	187	0.	2813	0.	-39.6
16	8.51E+05	210	1.66E+03	3158	0.	
18	2.84E+05	233	9.06E+02	3503	0.	TAS (M/S)
19	5.68E+05	256	9.95E+02	3848	0.	119.3
21	1.14E+06	279	1.11E+03	4193	0.	
23	2.84E+05	302	0.	4538	0.	NT (N/M3)
25	5.68E+05	325	0.	4883	0.	1095.4
27	0.	348	0.	5228	0.	
						TOTALS
IWC	6.19E-05		2.11E-04		8.83E-06	2.20E-04
MED D	16		120		293	122

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:24:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 355.3
2	1.62E+09	26	0.	465	0.	ALT (KM)
3	2.55E+06	49	1.68E+04	743	0.	8.011
5	1.99E+06	72	0.	1088	0.	
7	3.41E+06	95	2.35E+03	1433	0.	TEMP (C)
9	1.14E+06	118	1.60E+03	1778	0.	-33.2
11	1.42E+06	141	1.18E+03	2123	0.	
12	1.14E+06	164	9.32E+02	2468	0.	FROSTPOINT
14	2.85E+05	187	0.	2813	0.	-39.6
16	5.68E+05	210	0.	3158	0.	
18	8.51E+05	233	0.	3503	0.	TAS (M/S)
19	2.83E+05	256	0.	3848	0.	119.8
21	2.85E+05	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	2.85E+05	325	0.	4883	0.	526.2
27	0.	348	0.	5228	0.	
						TOTALS
IWC	3.77E-05		4.66E-05		0.	4.66E-05
MED D	12		76		0	76

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:25:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 353.5
2	1.72E+09	26	3.16E+04	465	0.	ALT (KM)
3	3.36E+06	49	1.66E+04	743	0.	8.045
5	2.24E+06	72	0.	1088	0.	
7	2.52E+06	95	0.	1433	0.	TEMP (C)
9	1.12E+06	118	0.	1778	0.	-33.5
11	5.59E+05	141	1.17E+03	2123	0.	
12	8.41E+05	164	0.	2468	0.	FROSTPOINT
14	1.12E+06	187	7.59E+02	2813	0.	-39.9
16	5.60E+05	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	2.81E+05	256	0.	3848	0.	121.2
21	2.81E+05	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	425.9
27	0.	348	0.	5228	0.	
						TOTALS
IWC	3.00E-05		3.67E-05		0.	3.67E-05
MED D	2		84		0	84

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:26:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 346.7
2	9.64E+08	26	7.16E+05	465	1.04E+03	ALT (KM)
3	4.21E+07	49	4.10E+05	743	0.	8.178
5	3.68E+07	72	7.69E+03	1088	0.	
7	2.77E+07	95	1.60E+04	1433	0.	TEMP (C)
9	2.10E+07	118	4.20E+04	1778	0.	-34.6
11	1.44E+07	141	1.38E+04	2123	0.	
12	1.08E+07	164	1.36E+04	2468	0.	FROSTPOINT
14	1.05E+07	187	4.49E+03	2813	0.	-39.9
16	9.12E+06	210	8.08E+03	3158	0.	
18	5.53E+06	233	2.65E+03	3503	0.	TAS (M/S)
19	4.15E+06	256	3.88E+03	3848	0.	122.4
21	3.32E+06	279	0.	4193	0.	
23	3.32E+06	302	1.04E+03	4538	0.	NT (N/M3)
25	1.11E+06	325	2.08E+03	4883	0.	12306.2
27	1.93E+06	348	1.86E+03	5228	0.	
						TOTALS
IWC	3.36E-04		1.63E-03		1.02E-03	2.65E-03
MED D	18		94		217	141

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:25:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 350.8
2	1.83E+09	26	0.	465	0.	ALT (KM)
3	0.	49	0.	743	0.	8.098
5	0.	72	0.	1088	0.	
7	0.	95	0.	1433	0.	TEMP (C)
9	0.	118	0.	1778	0.	-34.0
11	2.77E+05	141	0.	2123	0.	
12	0.	164	8.98E+02	2468	0.	FROSTPOINT
14	0.	187	0.	2813	0.	-40.1
16	0.	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	122.7
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	20.7
27	0.	348	0.	5228	0.	
						TOTALS
IWC	1.63E-05		1.00E-05		0.	1.00E-05
MED D	2		97		0	97

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:26:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 343.0
2	5.22E+08	26	1.19E+06	465	1.80E+02	ALT (KM)
3	9.89E+07	49	1.07E+06	743	4.71E-01	8.252
5	7.95E+07	72	3.49E+04	1088	0.	
7	7.16E+07	95	6.00E+04	1433	0.	TEMP (C)
9	4.60E+07	118	1.43E+05	1778	0.	-35.2
11	3.23E+07	141	4.54E+04	2123	0.	
12	1.79E+07	164	3.02E+04	2468	0.	FROSTPOINT
14	2.84E+07	187	1.05E+04	2813	0.	-38.6
16	1.56E+07	210	8.13E+03	3158	0.	
18	8.64E+06	233	9.74E+03	3503	0.	TAS (M/S)
19	5.31E+06	256	8.79E+03	3848	0.	121.4
21	6.42E+06	279	4.32E+03	4193	0.	
23	4.46E+06	302	2.96E+03	4538	0.	NT (N/M3)
25	5.56E+06	325	2.03E+03	4883	0.	33032.5
27	5.30E+06	348	1.36E+03	5228	0.	
						TOTALS
IWC	6.90E-04		3.93E-03		1.24E-04	4.65E-03
MED D	18		83		217	85

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:27:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 340.2
2	1.27E+09	26	3.45E+05	465	0.	ALT (KM)
3	1.51E+07	49	1.81E+05	743	0.	8.309
5	1.12E+07	72	7.72E+03	1088	0.	
7	1.06E+07	95	6.92E+03	1433	0.	TEMP (C)
9	8.09E+06	118	2.66E+04	1778	0.	-35.6
11	6.69E+06	141	3.49E+03	2123	0.	
12	4.18E+06	164	5.48E+03	2468	0.	FROSTPOINT
14	2.50E+06	187	3.02E+03	2813	0.	-38.3
16	2.51E+06	210	2.44E+03	3158	0.	
18	2.23E+06	233	3.55E+03	3503	0.	TAS (M/S)
19	1.67E+06	256	0.	3848	0.	121.5
21	1.40E+06	279	0.	4193	0.	
23	1.12E+06	302	0.	4538	0.	NT (N/M3)
25	5.57E+05	325	0.	4883	0.	5535.5
27	0.	348	0.	5228	0.	
						TOTALS
IWC	1.18E-04		6.21E-04		0.	6.21E-04
MED D	17		78		0	78

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:28:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 334.6
2	6.44E+08	26	8.78E+05	465	2.65E+02	ALT (KM)
3	7.86E+07	49	8.82E+05	743	4.78E-01	8.423
5	6.19E+07	72	2.71E+04	1088	0.	
7	5.32E+07	95	1.84E+04	1433	0.	TEMP (C)
9	3.37E+07	118	5.96E+04	1778	0.	-36.7
11	2.37E+07	141	2.55E+04	2123	0.	
12	1.87E+07	164	2.10E+04	2468	0.	FROSTPOINT
14	1.67E+07	187	6.79E+03	2813	0.	-41.7
16	1.84E+07	210	1.79E+04	3158	0.	
18	8.08E+06	233	1.42E+04	3503	0.	TAS (M/S)
19	5.85E+06	256	1.76E+04	3848	0.	121.6
21	5.85E+06	279	2.17E+03	4193	0.	
23	4.18E+06	302	2.81E+03	4538	0.	NT (N/M3)
25	3.90E+06	325	3.63E+03	4883	0.	25358.8
27	5.01E+06	348	2.36E+03	5228	0.	
						TOTALS
IWC	6.01E-04		3.50E-03		1.80E-04	3.68E-03
MED D	19		115		217	117

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:27:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 337.3
2	1.70E+09	26	6.28E+04	465	0.	ALT (KM)
3	8.65E+06	49	6.60E+04	743	0.	8.368
5	5.30E+06	72	7.77E+03	1088	0.	
7	6.42E+06	95	9.22E+03	1433	0.	TEMP (C)
9	2.23E+06	118	6.29E+03	1778	0.	-36.1
11	3.83E+06	141	4.64E+03	2123	0.	
12	1.95E+06	164	2.74E+03	2468	0.	FROSTPOINT
14	2.23E+06	187	7.57E+02	2813	0.	-39.9
16	1.67E+06	210	8.15E+02	3158	0.	
18	8.37E+05	233	1.77E+03	3503	0.	TAS (M/S)
19	8.39E+05	256	0.	3848	0.	121.3
21	2.79E+05	279	2.18E+03	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	1.11E+06	325	0.	4883	0.	2350.9
27	0.	348	0.	5228	0.	
						TOTALS
IWC	7.23E-05		3.53E-04		0.	3.53E-04
MED D	15		96		0	96

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:28:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 332.5
2	2.66E+08	26	1.79E+06	465	5.31E+02	ALT (KM)
3	1.71E+08	49	1.97E+06	743	4.74E-01	8.465
5	1.50E+08	72	3.48E+04	1088	0.	
7	1.13E+08	95	6.29E+04	1433	0.	TEMP (C)
9	8.23E+07	118	1.32E+05	1778	0.	-37.0
11	6.34E+07	141	7.08E+04	2123	0.	
12	3.92E+07	164	5.94E+04	2468	0.	FROSTPOINT
14	4.65E+07	187	3.24E+04	2813	0.	-41.8
16	3.31E+07	210	7.06E+04	3158	0.	
18	1.89E+07	233	3.19E+04	3503	0.	TAS (M/S)
19	1.14E+07	256	2.63E+04	3848	0.	121.7
21	9.74E+06	279	2.28E+04	4193	0.	
23	1.19E+07	302	1.53E+04	4538	0.	NT (N/M3)
25	8.90E+06	325	1.03E+04	4883	0.	58352.1
27	6.11E+06	348	6.34E+03	5228	0.	
						TOTALS
IWC	1.24E-03		9.79E-03		3.44E-04	1.01E-02
MED D	18		118		217	119

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:29:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 330.7
2	7.82E+08	26	6.27E+05	465	4.34E+02	ALT (KM)
3	8.63E+07	49	8.00E+05	743	4.76E-01	8.502
5	6.20E+07	72	1.55E+04	1088	0.	
7	6.48E+07	95	2.76E+04	1433	0.	TEMP (C)
9	2.89E+07	118	4.70E+04	1778	0.	-37.3
11	3.14E+07	141	2.44E+04	2123	0.	
12	2.03E+07	164	1.74E+04	2468	0.	FROSTPOINT
14	2.09E+07	187	1.88E+04	2813	0.	-40.2
16	1.42E+07	210	2.36E+04	3158	0.	
18	1.00E+07	233	2.57E+04	3503	0.	TAS (M/S)
19	7.23E+06	256	1.56E+04	3848	0.	121.7
21	3.62E+06	279	7.59E+03	4193	0.	
23	5.01E+06	302	7.60E+03	4538	0.	NT (N/M3)
25	2.23E+06	325	7.60E+03	4883	0.	24030.5
27	3.89E+06	348	4.75E+03	5228	0.	
						TOTALS
IWC	5.76E-04		4.62E-03		2.84E-04	4.90E-03
MED D	17		126		217	128

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:30:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 325.8
2	1.16E+09	26	5.96E+05	465	2.53E+03	ALT (KM)
3	7.70E+07	49	7.83E+05	743	0.	8.604
5	5.56E+07	72	1.16E+04	1088	0.	
7	5.20E+07	95	1.15E+04	1433	0.	TEMP (C)
9	3.45E+07	118	6.27E+04	1778	0.	-38.1
11	2.64E+07	141	2.90E+04	2123	0.	
12	1.56E+07	164	2.10E+04	2468	0.	FROSTPOINT
14	2.25E+07	187	1.81E+04	2813	0.	-41.9
16	1.42E+07	210	2.85E+04	3158	0.	
18	8.90E+06	233	2.22E+04	3503	0.	TAS (M/S)
19	3.62E+06	256	1.17E+04	3848	0.	121.7
21	6.12E+06	279	4.35E+03	4193	0.	
23	6.13E+06	302	4.69E+03	4538	0.	NT (N/M3)
25	2.50E+06	325	5.06E+03	4883	0.	23875.9
27	3.90E+06	348	4.51E+03	5228	0.	
						TOTALS
IWC	5.74E-04		4.19E-03		2.51E-03	6.70E-03
MED D	18		119		217	149

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:29:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 328.1
2	9.32E+08	26	1.19E+06	465	2.57E+03	ALT (KM)
3	1.14E+08	49	1.22E+06	743	0.	8.556
5	7.91E+07	72	1.54E+04	1088	0.	
7	6.19E+07	95	4.36E+04	1433	0.	TEMP (C)
9	4.33E+07	118	8.27E+04	1778	0.	-37.7
11	3.22E+07	141	6.13E+04	2123	0.	
12	2.19E+07	164	5.46E+04	2468	0.	FROSTPOINT
14	2.52E+07	187	3.68E+04	2813	0.	-40.7
16	1.97E+07	210	5.67E+04	3158	0.	
18	1.05E+07	233	1.95E+04	3503	0.	TAS (M/S)
19	1.28E+07	256	6.81E+03	3848	0.	122.1
21	6.66E+06	279	4.32E+03	4193	0.	
23	8.32E+06	302	4.71E+03	4538	0.	NT (N/M3)
25	6.11E+06	325	5.13E+03	4883	0.	37748.4
27	5.27E+06	348	4.58E+03	5228	0.	
						TOTALS
IWC	8.27E-04		6.05E-03		2.56E-03	8.61E-03
MED D	19		109		217	122

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:30:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 324.5
2	2.42E+09	26	3.13E+04	465	0.	ALT (KM)
3	1.06E+07	49	1.65E+04	743	0.	8.631
5	5.57E+05	72	0.	1088	0.	
7	1.12E+06	95	0.	1433	0.	TEMP (C)
9	2.78E+05	118	1.57E+03	1778	0.	-38.3
11	0.	141	0.	2123	0.	
12	5.57E+05	164	9.16E+02	2468	0.	FROSTPOINT
14	2.78E+05	187	0.	2813	0.	-42.4
16	0.	210	1.63E+03	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	121.5
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	2.78E+05	325	0.	4883	0.	474.4
27	0.	348	0.	5228	0.	
						TOTALS
IWC	2.85E-05		6.68E-05		0.	6.68E-05
MED D	2		101		0	101

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:31:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 323.1
2	2.43E+09	26	0.	465	0.	ALT (KM)
3	8.99E+06	49	0.	743	0.	8.661
5	0.	72	0.	1088	0.	
7	0.	95	0.	1433	0.	TEMP (C)
9	0.	118	0.	1778	0.	-38.6
11	0.	141	0.	2123	0.	
12	0.	164	0.	2468	0.	FROSTPOINT
14	0.	187	0.	2813	0.	-42.6
16	0.	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	120.6
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	0.0
27	0.	348	0.	5228	0.	
						TOTALS
IWC	2.16E-05		0.		0.	0.
MED D	2		0		0	0

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:32:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 321.9
2	2.48E+09	26	0.	465	0.	ALT (KM)
3	1.12E+07	49	0.	743	0.	8.685
5	0.	72	0.	1088	0.	
7	0.	95	0.	1433	0.	TEMP (C)
9	0.	118	0.	1778	0.	-39.1
11	0.	141	0.	2123	0.	
12	0.	164	0.	2468	0.	FROSTPOINT
14	0.	187	0.	2813	0.	-43.3
16	0.	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	121.0
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	0.0
27	0.	348	0.	5228	0.	
						TOTALS
IWC	2.22E-05		0.		0.	0.
MED D	2		0		0	0

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:31:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 322.3
2	2.56E+09	26	0.	465	0.	ALT (KM)
3	1.13E+07	49	0.	743	0.	8.677
5	0.	72	0.	1088	0.	
7	0.	95	0.	1433	0.	TEMP (C)
9	0.	118	0.	1778	0.	-38.9
11	0.	141	0.	2123	0.	
12	0.	164	0.	2468	0.	FROSTPOINT
14	0.	187	0.	2813	0.	-42.9
16	0.	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	120.0
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	0.0
27	0.	348	0.	5228	0.	
						TOTALS
IWC	2.29E-05		0.		0.	0.
MED D	2		0		0	0

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:32:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 321.4
2	2.47E+09	26	0.	465	0.	ALT (KM)
3	1.29E+07	49	0.	743	0.	8.696
5	0.	72	0.	1088	0.	
7	0.	95	0.	1433	0.	TEMP (C)
9	0.	118	0.	1778	0.	-39.2
11	0.	141	0.	2123	0.	
12	0.	164	0.	2468	0.	FROSTPOINT
14	0.	187	0.	2813	0.	-43.2
16	0.	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	123.2
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	0.0
27	0.	348	0.	5228	0.	
						TOTALS
IWC	2.23E-05		0.		0.	0.
MED D	2		0		0	0

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:33:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 321.1
2	2.42E+09	26	0.	465	0.	ALT (KM)
3	1.50E+07	49	0.	743	0.	8.703
5	0.	72	0.	1088	0.	
7	0.	95	0.	1433	0.	TEMP (C)
9	0.	118	0.	1778	0.	-39.1
11	0.	141	0.	2123	0.	
12	0.	164	0.	2468	0.	FROSTPOINT
14	0.	187	0.	2813	0.	-42.9
16	0.	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	126.7
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	0.0
27	0.	348	0.	5228	0.	
						TOTALS
IWC	2.19E-05		0.		0.	0.
MED D	2		0		0	0

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:34:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 320.8
2	2.62E+09	26	0.	465	0.	ALT (KM)
3	1.48E+07	49	0.	743	0.	8.709
5	0.	72	0.	1088	0.	
7	0.	95	0.	1433	0.	TEMP (C)
9	0.	118	0.	1778	0.	-39.0
11	0.	141	0.	2123	0.	
12	0.	164	0.	2468	0.	FROSTPOINT
14	0.	187	0.	2813	0.	-43.7
16	0.	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	128.0
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	0.0
27	0.	348	0.	5228	0.	
						TOTALS
IWC	2.37E-05		0.		0.	0.
MED D	2		0		0	0

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:33:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 321.3
2	2.64E+09	26	0.	465	0.	ALT (KM)
3	1.54E+07	49	0.	743	0.	8.698
5	0.	72	0.	1088	0.	
7	0.	95	0.	1433	0.	TEMP (C)
9	0.	118	0.	1778	0.	-39.0
11	0.	141	0.	2123	0.	
12	0.	164	0.	2468	0.	FROSTPOINT
14	0.	187	0.	2813	0.	-43.3
16	0.	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	127.9
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	0.0
27	0.	348	0.	5228	0.	
						TOTALS
IWC	2.39E-05		0.		0.	0.
MED D	2		0		0	0

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:34:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 320.3
2	2.61E+09	26	0.	465	0.	ALT (KM)
3	1.38E+07	49	0.	743	0.	8.719
5	0.	72	0.	1088	0.	
7	0.	95	0.	1433	0.	TEMP (C)
9	0.	118	0.	1778	0.	-39.0
11	0.	141	0.	2123	0.	
12	0.	164	0.	2468	0.	FROSTPOINT
14	0.	187	0.	2813	0.	-43.4
16	0.	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	127.5
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	0.0
27	0.	348	0.	5228	0.	
						TOTALS
IWC	2.35E-05		0.		0.	0.
MED D	2		0		0	0

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:35:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 320.7
2	2.31E+09	26	1.51E+05	465	0.	ALT (KM)
3	5.46E+07	49	1.19E+05	743	0.	8.711
5	3.48E+07	72	1.49E+04	1088	0.	
7	3.08E+07	95	1.33E+04	1433	0.	TEMP (C)
9	1.66E+07	118	2.56E+04	1778	0.	-38.9
11	1.69E+07	141	5.57E+03	2123	0.	
12	8.02E+06	164	4.39E+03	2468	0.	FROSTPOINT
14	8.83E+06	187	0.	2813	0.	-42.3
16	7.49E+06	210	7.83E+02	3158	0.	
18	4.01E+06	233	0.	3503	0.	TAS (M/S)
19	4.01E+06	256	0.	3848	0.	126.7
21	2.41E+06	279	1.04E+03	4193	0.	
23	1.34E+06	302	0.	4538	0.	NT (N/M3)
25	2.94E+06	325	0.	4883	0.	4240.9
27	1.60E+06	348	0.	5228	0.	
						TOTALS
IWC	3.11E-04		4.51E-04		0.	4.51E-04
MED D	18		74		0	74

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:36:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 321.1
2	2.80E+09	26	1.84E+05	465	8.20E+00	ALT (KM)
3	2.91E+07	49	6.47E+04	743	1.31E+01	8.703
5	4.10E+06	72	0.	1088	4.91E-01	
7	4.09E+06	95	0.	1433	0.	TEMP (C)
9	5.46E+06	118	1.07E+04	1778	0.	-38.9
11	5.44E+06	141	4.55E+03	2123	0.	
12	2.45E+06	164	8.97E+02	2468	0.	FROSTPOINT
14	3.27E+06	187	1.48E+03	2813	0.	-39.7
16	5.42E+05	210	7.98E+02	3158	0.	
18	5.46E+05	233	8.71E+02	3503	0.	TAS (M/S)
19	5.47E+05	256	0.	3848	0.	124.6
21	5.47E+05	279	0.	4193	0.	
23	8.19E+05	302	0.	4538	0.	NT (N/M3)
25	8.16E+05	325	0.	4883	0.	1940.4
27	2.73E+05	348	0.	5228	0.	
						TOTALS
IWC	9.51E-05		2.34E-04		8.46E-05	3.19E-04
MED D	14		79		297	90

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:35:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 320.6
2	2.08E+09	26	5.43E+05	465	0.	ALT (KM)
3	8.79E+07	49	4.05E+05	743	0.	8.714
5	5.84E+07	72	2.61E+04	1088	0.	
7	4.37E+07	95	6.21E+04	1433	0.	TEMP (C)
9	3.08E+07	118	1.04E+05	1778	0.	-38.9
11	2.52E+07	141	2.90E+04	2123	0.	
12	1.87E+07	164	7.91E+03	2468	0.	FROSTPOINT
14	1.93E+07	187	4.35E+03	2813	0.	-40.3
16	1.74E+07	210	3.92E+03	3158	0.	
18	8.58E+06	233	8.53E+02	3503	0.	TAS (M/S)
19	3.48E+06	256	1.88E+03	3848	0.	126.2
21	4.29E+06	279	0.	4193	0.	
23	4.02E+06	302	0.	4538	0.	NT (N/M3)
25	3.48E+06	325	0.	4883	0.	14826.3
27	2.68E+06	348	0.	5228	0.	
						TOTALS
IWC	5.32E-04		1.67E-03		0.	1.67E-03
MED D	17		74		0	74

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:36:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 321.5
2	2.45E+09	26	9.25E+04	465	3.32E+02	ALT (KM)
3	5.97E+07	49	4.08E+04	743	4.85E+01	8.694
5	3.08E+07	72	7.66E+03	1088	1.48E+00	
7	2.75E+07	95	9.08E+03	1433	0.	TEMP (C)
9	1.38E+07	118	7.72E+03	1778	0.	-38.5
11	1.93E+07	141	0.	2123	0.	
12	1.21E+07	164	1.79E+03	2468	0.	FROSTPOINT
14	1.07E+07	187	0.	2813	0.	-40.1
16	1.07E+07	210	0.	3158	0.	
18	4.96E+06	233	0.	3503	0.	TAS (M/S)
19	2.20E+06	256	9.68E+02	3848	0.	123.2
21	1.93E+06	279	3.21E+03	4193	0.	
23	2.21E+06	302	1.67E+03	4538	0.	NT (N/M3)
25	2.74E+05	325	8.65E+02	4883	0.	1792.0
27	2.20E+06	348	7.40E+02	5228	0.	
						TOTALS
IWC	3.07E-04		4.69E-04		5.96E-04	1.17E-03
MED D	16		147		246	194

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:37:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 321.9
2	1.29E+09	26	1.61E+06	465	1.67E+03	ALT (KM)
3	2.14E+08	49	9.14E+05	743	3.72E+01	8.685
5	1.41E+08	72	3.90E+04	1088	1.50E+00	
7	1.18E+08	95	6.72E+04	1433	0.	TEMP (C)
9	9.69E+07	118	1.66E+05	1778	0.	-38.2
11	6.38E+07	141	7.83E+04	2123	0.	
12	5.16E+07	164	4.97E+04	2468	0.	FROSTPOINT
14	4.96E+07	187	1.90E+04	2813	0.	-40.0
16	3.44E+07	210	4.66E+04	3158	0.	
18	2.21E+07	233	2.95E+04	3503	0.	TAS (M/S)
19	1.60E+07	256	1.67E+04	3848	0.	121.1
21	1.51E+07	279	1.09E+04	4193	0.	
23	1.09E+07	302	1.11E+04	4538	0.	NT (N/M3)
25	1.04E+07	325	1.12E+04	4883	0.	34035.3
27	9.25E+06	348	8.21E+03	5228	0.	
						TOTALS
IWC	1.47E-03		7.73E-03		1.73E-03	9.46E-03
MED D	18		117		222	127

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:38:00*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 321.5
2	8.58E+08	26	2.28E+06	465	4.37E+02	ALT (KM)
3	2.59E+08	49	1.62E+06	743	4.82E-01	8.694
5	2.03E+08	72	6.64E+04	1088	0.	
7	1.60E+08	95	1.42E+05	1433	0.	TEMP (C)
9	1.14E+08	118	2.54E+05	1778	0.	-38.2
11	8.87E+07	141	1.07E+05	2123	0.	
12	6.62E+07	164	6.45E+04	2468	0.	FROSTPOINT
14	6.37E+07	187	2.35E+04	2813	0.	-38.7
16	5.53E+07	210	4.92E+04	3158	0.	
18	2.10E+07	233	2.95E+04	3503	0.	TAS (M/S)
19	2.11E+07	256	2.46E+04	3848	0.	120.8
21	1.80E+07	279	1.20E+04	4193	0.	
23	1.80E+07	302	9.61E+03	4538	0.	NT (N/M3)
25	1.15E+07	325	7.68E+03	4883	0.	55601.1
27	1.37E+07	348	4.80E+03	5228	0.	
						TOTALS
IWC	1.94E-03		9.35E-03		2.87E-04	9.63E-03
MED D	19		99		217	102

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:37:30*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 321.8
2	7.08E+08	26	3.82E+06	465	5.65E+02	ALT (KM)
3	3.38E+08	49	2.20E+06	743	9.68E-01	8.688
5	2.53E+08	72	7.07E+04	1088	0.	
7	2.03E+08	95	2.39E+05	1433	0.	TEMP (C)
9	1.48E+08	118	4.89E+05	1778	0.	-38.2
11	1.20E+08	141	1.84E+05	2123	0.	
12	7.42E+07	164	1.00E+05	2468	0.	FROSTPOINT
14	9.62E+07	187	3.75E+04	2813	0.	-40.5
16	6.82E+07	210	5.87E+04	3158	0.	
18	3.11E+07	233	3.52E+04	3503	0.	TAS (M/S)
19	2.72E+07	256	1.98E+04	3848	0.	119.7
21	2.80E+07	279	1.76E+04	4193	0.	
23	2.24E+07	302	1.31E+04	4538	0.	NT (N/M3)
25	2.07E+07	325	9.78E+03	4883	0.	80227.3
27	1.75E+07	348	6.13E+03	5228	0.	
						TOTALS
IWC	2.65E-03		1.35E-02		4.02E-04	1.39E-02
MED D	19		90		217	92

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:38:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: HULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 321.6
2	1.61E+09	26	1.34E+06	437	2.47E+03	ALT (KM)
3	1.95E+08	47	7.43E+05	706	6.34E+01	8.691
5	1.35E+08	67	1.31E+04	1011	1.69E+00	
7	1.26E+08	87	5.71E+04	1316	0.	TEMP (C)
9	8.42E+07	108	1.15E+05	1622	0.	-38.1
11	6.28E+07	128	7.06E+04	1927	0.	
12	4.25E+07	148	3.50E+04	2233	0.	FROSTPOINT
14	3.97E+07	169	1.87E+04	2538	0.	-38.4
16	3.25E+07	189	2.75E+04	2843	0.	
18	2.00E+07	209	2.50E+04	3149	0.	TAS (M/S)
19	1.58E+07	230	2.64E+04	3454	0.	121.9
21	9.18E+06	250	1.47E+04	3760	0.	
23	1.05E+07	271	1.63E+04	4065	0.	NT (N/M3)
25	8.33E+06	291	1.81E+04	4370	0.	24506.9
27	8.61E+06	311	1.37E+04	4676	0.	
						TOTALS
IWC	1.30E-03		3.18E-03		2.43E-03	5.61E-03
MED D	18		94		199	132

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:39:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 321.3
2	6.08E+08	26	2.37E+06	437	5.49E+03	ALT (KM)
3	3.95E+08	47	1.10E+06	706	2.13E+02	8.699
5	3.06E+08	67	3.87E+04	1011	8.94E+00	
7	2.62E+08	87	9.24E+04	1316	0.	TEMP (C)
9	1.87E+08	108	1.74E+05	1622	0.	-38.2
11	1.44E+08	128	6.97E+04	1927	0.	
12	8.41E+07	148	6.80E+04	2233	0.	FROSTPOINT
14	9.64E+07	169	3.85E+04	2538	0.	-39.6
16	7.59E+07	189	8.59E+04	2843	0.	
18	3.78E+07	209	7.88E+04	3149	0.	TAS (M/S)
19	3.04E+07	230	5.96E+04	3454	0.	123.7
21	2.36E+07	250	4.21E+04	3760	0.	
23	2.60E+07	271	3.68E+04	4065	0.	NT (N/M3)
25	2.27E+07	291	3.22E+04	4370	0.	40877.6
27	1.86E+07	311	2.52E+04	4676	0.	
						TOTALS
IWC	2.91E-03		6.43E-03		5.82E-03	1.23E-02
MED D	18		97		203	137

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:40:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 320.7
2	1.73E+09	26	9.87E+05	437	6.89E+02	ALT (KM)
3	1.56E+08	47	5.55E+05	706	1.35E+01	8.710
5	1.10E+08	67	2.10E+04	1011	0.	
7	9.03E+07	87	5.01E+04	1316	0.	TEMP (C)
9	6.64E+07	108	9.37E+04	1622	0.	-38.3
11	4.74E+07	128	4.54E+04	1927	0.	
12	3.11E+07	148	3.68E+04	2233	0.	FROSTPOINT
14	3.43E+07	169	1.39E+04	2538	0.	-36.8
16	3.13E+07	189	3.45E+04	2843	0.	
18	1.21E+07	209	2.31E+04	3149	0.	TAS (M/S)
19	8.31E+06	230	2.44E+04	3454	0.	126.1
21	8.30E+06	250	1.18E+04	3760	0.	
23	8.56E+06	271	8.16E+03	4065	0.	NT (N/M3)
25	7.77E+06	291	5.66E+03	4370	0.	19055.5
27	6.42E+06	311	4.22E+03	4676	0.	
						TOTALS
IWC	1.02E-03		2.21E-03		6.44E-04	2.85E-03
MED D	18		84		197	97

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:39:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 321.1
2	5.58E+08	26	1.62E+06	437	7.08E+03	ALT (KM)
3	4.07E+08	47	1.04E+06	706	1.54E+02	8.702
5	3.27E+08	67	3.39E+04	1011	3.88E+00	
7	2.81E+08	87	3.31E+04	1316	5.84E-01	TEMP (C)
9	1.81E+08	108	9.84E+04	1622	0.	-38.3
11	1.60E+08	128	5.24E+04	1927	0.	
12	9.25E+07	148	5.43E+04	2233	0.	FROSTPOINT
14	1.12E+08	169	3.24E+04	2538	0.	-37.7
16	8.18E+07	189	1.08E+05	2843	0.	
18	4.41E+07	209	9.70E+04	3149	0.	TAS (M/S)
19	3.32E+07	230	6.04E+04	3454	0.	124.9
21	2.56E+07	250	4.67E+04	3760	0.	
23	2.42E+07	271	5.15E+04	4065	0.	NT (N/M3)
25	1.66E+07	291	5.69E+04	4370	0.	38418.9
27	1.47E+07	311	4.26E+04	4676	0.	
						TOTALS
IWC	2.91E-03		7.58E-03		6.85E-03	1.44E-02
MED D	17		108		198	138

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:40:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 320.9
2	2.60E+09	26	3.09E+05	437	1.71E+02	ALT (KM)
3	7.96E+07	47	9.02E+04	706	2.61E+00	8.707
5	3.51E+07	67	4.20E+03	1011	0.	
7	2.89E+07	87	2.27E+04	1316	0.	TEMP (C)
9	2.13E+07	108	3.60E+04	1622	0.	-38.2
11	1.62E+07	128	1.52E+04	1927	0.	
12	1.16E+07	148	9.02E+03	2233	0.	FROSTPOINT
14	1.05E+07	169	5.78E+03	2538	0.	-39.7
16	7.82E+06	189	1.07E+04	2843	0.	
18	4.58E+06	209	4.85E+03	3149	0.	TAS (M/S)
19	2.97E+06	230	5.34E+03	3454	0.	125.7
21	2.16E+06	250	2.36E+03	3760	0.	
23	1.89E+06	271	1.82E+03	4065	0.	NT (N/M3)
25	2.70E+06	291	1.40E+03	4370	0.	4327.8
27	1.35E+06	311	1.05E+03	4676	0.	
						TOTALS
IWC	3.22E-04		5.87E-04		1.50E-04	7.37E-04
MED D	17		81		196	88

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:41:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 320.3
2	1.86E+09	26	6.76E+05	437	6.93E+02	ALT (KM)
3	1.31E+08	47	2.84E+05	706	1.23E+01	8.719
5	8.13E+07	67	1.67E+04	1011	0.	
7	6.83E+07	87	4.73E+04	1316	0.	TEMP (C)
9	4.60E+07	108	7.78E+04	1622	0.	-38.2
11	3.38E+07	128	2.75E+04	1927	0.	
12	2.21E+07	148	1.58E+04	2233	0.	FROSTPOINT
14	2.63E+07	169	8.11E+03	2538	0.	-40.9
16	2.47E+07	189	2.46E+04	2843	0.	
18	9.58E+06	209	8.61E+03	3149	0.	TAS (M/S)
19	6.92E+06	230	2.10E+03	3454	0.	127.6
21	5.84E+06	250	7.03E+03	3760	0.	
23	6.12E+06	271	6.47E+03	4065	0.	NT (N/M3)
25	5.05E+06	291	5.96E+03	4370	0.	11088.8
27	3.98E+06	311	4.42E+03	4676	0.	
						TOTALS
IWC	7.44E-04		1.34E-03		6.41E-04	1.98E-03
MED D	17		83		196	115

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:42:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 317.9
2	2.10E+09	26	8.92E+05	437	5.92E+02	ALT (KM)
3	1.13E+08	47	3.25E+05	706	1.51E+01	8.771
5	6.37E+07	67	8.46E+03	1011	0.	
7	5.19E+07	87	3.03E+04	1316	0.	TEMP (C)
9	3.67E+07	108	6.18E+04	1622	0.	-38.6
11	3.48E+07	128	2.16E+04	1927	0.	
12	1.67E+07	148	2.20E+04	2233	0.	FROSTPOINT
14	2.08E+07	169	1.24E+04	2538	0.	-40.2
16	1.62E+07	189	1.78E+04	2843	0.	
18	1.05E+07	209	9.71E+03	3149	0.	TAS (M/S)
19	8.64E+06	230	9.61E+03	3454	0.	125.3
21	5.95E+06	250	7.13E+03	3760	0.	
23	8.91E+06	271	5.48E+03	4065	0.	NT (N/M3)
25	5.14E+06	291	4.22E+03	4370	0.	11110.9
27	3.24E+06	311	3.21E+03	4676	0.	
						TOTALS
IWC	7.09E-04		1.31E-03		5.71E-04	1.88E-03
MED D	19		82		198	106

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:41:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 318.0
2	2.55E+09	26	3.76E+05	437	3.88E+02	ALT (KM)
3	8.82E+07	47	3.78E+05	706	1.04E+00	8.767
5	5.86E+07	67	8.44E+03	1011	0.	
7	5.00E+07	87	2.01E+04	1316	0.	TEMP (C)
9	3.68E+07	108	5.97E+04	1622	0.	-38.5
11	2.50E+07	128	2.66E+04	1927	0.	
12	1.56E+07	148	1.39E+04	2233	0.	FROSTPOINT
14	1.94E+07	169	7.38E+03	2538	0.	-38.9
16	1.18E+07	189	1.60E+04	2843	0.	
18	6.71E+06	209	8.70E+03	3149	0.	TAS (M/S)
19	4.83E+06	230	4.26E+03	3454	0.	126.1
21	4.04E+06	250	0.	3760	0.	
23	2.95E+06	271	3.39E+03	4065	0.	NT (N/M3)
25	4.31E+06	291	6.78E+03	4370	0.	11427.8
27	3.22E+06	311	4.56E+03	4676	0.	
						TOTALS
IWC	5.21E-04		1.08E-03		3.01E-04	1.38E-03
MED D	17		81		192	94

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:42:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 316.8
2	1.06E+09	26	1.95E+06	437	1.71E+03	ALT (KM)
3	2.31E+08	47	8.82E+05	706	4.17E+01	8.794
5	1.67E+08	67	3.80E+04	1011	1.64E+00	
7	1.36E+08	87	7.54E+04	1316	0.	TEMP (C)
9	1.00E+08	108	1.42E+05	1622	0.	-38.7
11	8.15E+07	128	5.57E+04	1927	0.	
12	4.95E+07	148	5.78E+04	2233	0.	FROSTPOINT
14	6.24E+07	169	1.15E+04	2538	0.	-41.2
16	4.12E+07	189	4.44E+04	2843	0.	
18	1.96E+07	209	3.30E+04	3149	0.	TAS (M/S)
19	1.69E+07	230	2.88E+04	3454	0.	126.1
21	1.18E+07	250	1.42E+04	3760	0.	
23	1.24E+07	271	1.35E+04	4065	0.	NT (N/M3)
25	7.53E+06	291	1.28E+04	4370	0.	29295.5
27	9.69E+06	311	9.69E+03	4676	0.	
						TOTALS
IWC	1.51E-03		3.34E-03		1.68E-03	5.02E-03
MED D	17		85		199	112

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:43:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 314.9
2	1.83E+09	26	2.06E+05	437	8.29E+02	ALT (KM)
3	1.09E+08	47	3.26E+05	706	3.29E+01	8.835
5	6.41E+07	67	1.27E+04	1011	2.74E+00	
7	5.78E+07	87	1.52E+04	1316	0.	TEMP (C)
9	4.14E+07	108	5.51E+04	1622	0.	-39.1
11	2.59E+07	128	1.40E+04	1927	0.	
12	1.84E+07	148	1.81E+04	2233	0.	FROSTPOINT
14	2.38E+07	169	9.93E+03	2538	0.	-40.4
16	1.38E+07	189	1.60E+04	2843	0.	
18	8.92E+06	209	1.17E+04	3149	0.	TAS (M/S)
19	4.33E+06	230	9.63E+03	3454	0.	125.3
21	5.95E+06	250	3.57E+03	3760	0.	
23	5.67E+06	271	4.11E+03	4065	0.	NT (N/M3)
25	5.93E+06	291	4.73E+03	4370	0.	10477.9
27	3.50E+06	311	3.71E+03	4676	0.	
						TOTALS
IWC	6.40E-04		1.10E-03		8.98E-04	2.10E-03
MED D	18		86		205	132

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:44:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 310.8
2	2.54E+09	26	5.57E+05	437	6.94E+02	ALT (KM)
3	1.14E+08	47	5.04E+05	706	1.11E+01	8.922
5	6.21E+07	67	3.01E+04	1011	0.	
7	4.46E+07	87	1.79E+04	1316	0.	TEMP (C)
9	3.56E+07	108	6.09E+04	1622	0.	-39.9
11	2.46E+07	128	1.55E+04	1927	0.	
12	1.72E+07	148	1.12E+04	2233	0.	FROSTPOINT
14	1.75E+07	169	7.53E+03	2538	0.	-42.7
16	1.53E+07	189	1.63E+04	2843	0.	
18	6.57E+06	209	1.48E+04	3149	0.	TAS (M/S)
19	3.28E+06	230	5.42E+03	3454	0.	124.8
21	4.11E+06	250	7.23E+03	3760	0.	
23	1.09E+06	271	6.75E+03	4065	0.	NT (N/M3)
25	6.01E+06	291	6.30E+03	4370	0.	14575.3
27	3.83E+06	311	4.64E+03	4676	0.	
						TOTALS
IWC	5.35E-04		1.35E-03		6.36E-04	1.98E-03
MED D	17		87		196	116

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:43:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 312.5
2	2.90E+09	26	3.45E+05	437	1.80E+02	ALT (KM)
3	6.50E+07	47	1.73E+05	706	2.11E+00	8.885
5	2.77E+07	67	4.26E+03	1011	0.	
7	1.90E+07	87	1.02E+04	1316	0.	TEMP (C)
9	1.77E+07	108	3.11E+04	1622	0.	-39.5
11	1.09E+07	128	1.53E+04	1927	0.	
12	6.25E+06	148	9.07E+03	2233	0.	FROSTPOINT
14	7.88E+06	169	1.66E+03	2538	0.	-40.6
16	7.06E+06	189	3.59E+03	2843	0.	
18	4.89E+06	209	7.82E+03	3149	0.	TAS (M/S)
19	2.99E+06	230	5.38E+03	3454	0.	124.5
21	1.36E+06	250	1.19E+03	3760	0.	
23	1.98E+06	271	1.48E+03	4065	0.	NT (N/M3)
25	8.15E+05	291	1.64E+03	4370	0.	5466.5
27	5.43E+05	311	1.21E+03	4676	0.	
						TOTALS
IWC	2.39E-04		5.42E-04		1.53E-04	6.95E-04
MED D	16		74		195	92

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:44:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 309.4
2	2.47E+09	26	3.48E+05	437	4.83E+02	ALT (KM)
3	8.22E+07	47	1.83E+05	706	1.70E+01	8.953
5	3.72E+07	67	8.54E+03	1011	5.55E-01	
7	3.15E+07	87	1.02E+04	1316	0.	TEMP (C)
9	3.12E+07	108	2.96E+04	1622	0.	-40.2
11	1.83E+07	128	1.16E+04	1927	0.	
12	1.37E+07	148	1.01E+04	2233	0.	FROSTPOINT
14	1.15E+07	169	5.86E+03	2538	0.	-44.1
16	1.15E+07	189	1.08E+04	2843	0.	
18	3.83E+06	209	4.93E+03	3149	0.	TAS (M/S)
19	4.38E+06	230	4.33E+03	3454	0.	124.4
21	2.74E+06	250	2.40E+03	3760	0.	
23	3.83E+06	271	2.64E+03	4065	0.	NT (N/M3)
25	3.28E+06	291	2.91E+03	4370	0.	6007.5
27	2.19E+06	311	2.26E+03	4676	0.	
						TOTALS
IWC	4.13E-04		6.68E-04		4.96E-04	1.56E-03
MED D	18		84		202	128

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:45:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.8
2	2.75E+09	26	4.45E+05	437	1.61E+02	ALT (KM)
3	7.06E+07	47	9.02E+04	706	4.18E+00	8.967
5	2.86E+07	67	8.51E+03	1011	0.	
7	2.37E+07	87	5.02E+03	1316	0.	TEMP (C)
9	1.46E+07	108	2.57E+04	1622	0.	-40.3
11	1.10E+07	128	1.39E+04	1927	0.	
12	8.62E+06	148	4.99E+03	2233	0.	FROSTPOINT
14	9.14E+06	169	7.41E+03	2538	0.	-43.9
16	4.85E+06	189	5.35E+03	2843	0.	
18	3.78E+06	209	4.86E+03	3149	0.	TAS (M/S)
19	2.68E+06	230	3.19E+03	3454	0.	125.7
21	5.41E+05	250	0.	3760	0.	
23	2.69E+06	271	5.21E+02	4065	0.	NT (N/M3)
25	2.43E+06	291	1.04E+03	4370	0.	3528.7
27	2.69E+05	311	8.04E+02	4676	0.	
						TOTALS
IWC	2.50E-04		4.22E-04		1.52E-04	5.73E-04
MED D	16		72		199	86

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:46:04*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.7
2	1.83E+09	26	8.73E+05	465	4.97E+02	ALT (KM)
3	1.43E+08	49	5.86E+05	743	5.51E+00	8.969
5	9.91E+07	72	1.85E+04	1088	0.	
7	7.98E+07	95	6.62E+04	1433	0.	TEMP (C)
9	5.88E+07	118	1.02E+05	1778	0.	-40.4
11	4.33E+07	141	4.45E+04	2123	0.	
12	2.57E+07	164	2.02E+04	2468	0.	FROSTPOINT
14	2.70E+07	187	1.30E+04	2813	0.	-42.3
16	2.19E+07	210	1.79E+04	3158	0.	
18	1.15E+07	233	6.83E+03	3503	0.	TAS (M/S)
19	8.28E+06	256	8.43E+03	3848	0.	126.8
21	7.21E+06	279	3.13E+03	4193	0.	
23	7.22E+06	302	3.72E+03	4538	0.	NT (N/M3)
25	7.75E+06	325	4.41E+03	4883	0.	20720.9
27	3.74E+06	348	3.08E+03	5228	0.	
						TOTALS
IWC	8.53E-04		3.59E-03		4.53E-04	4.04E-03
MED D	18		99		219	110

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:45:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.8
2	2.19E+09	26	6.63E+05	465	2.35E+02	ALT (KM)
3	1.02E+08	49	5.12E+05	743	5.14E-01	8.967
5	5.93E+07	72	2.93E+04	1088	0.	
7	4.28E+07	95	3.40E+04	1433	0.	TEMP (C)
9	3.19E+07	118	8.43E+04	1778	0.	-40.3
11	2.13E+07	141	2.10E+04	2123	0.	
12	1.73E+07	164	1.80E+04	2468	0.	FROSTPOINT
14	1.54E+07	187	9.38E+03	2813	0.	-43.5
16	1.14E+07	210	1.20E+04	3158	0.	
18	5.58E+06	233	1.39E+04	3503	0.	TAS (M/S)
19	3.72E+06	256	5.03E+03	3848	0.	127.3
21	2.93E+06	279	3.53E+03	4193	0.	
23	3.20E+06	302	3.25E+03	4538	0.	NT (N/M3)
25	2.66E+06	325	2.99E+03	4883	0.	21298.1
27	1.86E+06	348	1.97E+03	5228	0.	
						TOTALS
IWC	4.26E-04		1.71E-03		1.41E-04	1.85E-03
MED D	16		109		217	116

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:46:34*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.5
2	7.01E+08	26	2.55E+06	465	1.35E+03	ALT (KM)
3	2.77E+08	49	1.48E+06	743	1.33E+01	8.973
5	1.95E+08	72	6.29E+04	1088	0.	
7	1.51E+08	95	1.24E+05	1433	0.	TEMP (C)
9	1.16E+08	118	2.82E+05	1778	0.	-40.4
11	9.09E+07	141	1.13E+05	2123	0.	
12	5.68E+07	164	5.95E+04	2468	0.	FROSTPOINT
14	5.84E+07	187	2.45E+04	2813	0.	-41.2
16	5.23E+07	210	4.52E+04	3158	0.	
18	2.40E+07	233	2.63E+04	3503	0.	TAS (M/S)
19	1.71E+07	256	2.62E+04	3848	0.	127.1
21	2.00E+07	279	8.30E+03	4193	0.	
23	1.47E+07	302	1.05E+04	4538	0.	NT (N/M3)
25	1.28E+07	325	1.34E+04	4883	0.	52717.9
27	9.36E+06	348	9.18E+03	5228	0.	
						TOTALS
IWC	1.80E-03		9.78E-03		1.24E-03	1.10E-02
MED D	18		102		219	115

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:47:04*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.6
2	3.93E+08	26	3.38E+06	465	1.20E+03	ALT (KM)
3	3.53E+08	49	2.34E+06	743	6.38E+00	8.972
5	3.02E+08	72	8.14E+04	1088	0.	
7	2.44E+08	95	1.36E+05	1433	0.	TEMP (C)
9	1.71E+08	118	4.10E+05	1778	0.	-40.5
11	1.29E+08	141	1.83E+05	2123	0.	
12	7.92E+07	164	1.26E+05	2468	0.	FROSTPOINT
14	1.02E+08	187	7.62E+04	2813	0.	-41.1
16	6.72E+07	210	1.09E+05	3158	0.	
18	3.56E+07	233	7.36E+04	3503	0.	TAS (M/S)
19	2.95E+07	256	3.81E+04	3848	0.	127.6
21	2.13E+07	279	3.31E+04	4193	0.	
23	2.29E+07	302	2.27E+04	4538	0.	NT (N/M3)
25	1.60E+07	325	1.56E+04	4883	0.	84190.6
27	1.57E+07	348	1.02E+04	5228	0.	
						TOTALS
IWC	2.60E-03		1.78E-02		1.02E-03	1.89E-02
MED D	18		113		218	116

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:48:04*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.5
2	6.58E+08	26	2.21E+06	465	2.61E+03	ALT (KM)
3	3.35E+08	49	1.76E+06	743	1.54E+01	8.973
5	2.89E+08	72	6.99E+04	1088	0.	
7	2.43E+08	95	1.16E+05	1433	0.	TEMP (C)
9	1.62E+08	118	2.41E+05	1778	0.	-40.6
11	1.14E+08	141	9.04E+04	2123	0.	
12	7.62E+07	164	6.51E+04	2468	0.	FROSTPOINT
14	9.66E+07	187	4.08E+04	2813	0.	-41.9
16	7.20E+07	210	8.04E+04	3158	0.	
18	3.57E+07	233	8.18E+04	3503	0.	TAS (M/S)
19	2.33E+07	256	5.94E+04	3848	0.	128.1
21	1.93E+07	279	3.71E+04	4193	0.	
23	2.17E+07	302	3.53E+04	4538	0.	NT (N/M3)
25	1.91E+07	325	3.35E+04	4883	0.	63317.3
27	1.43E+07	348	2.21E+04	5228	0.	
						TOTALS
IWC	2.52E-03		1.71E-02		2.28E-03	1.94E-02
MED D	18		131		218	136

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:47:34*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.2
2	7.66E+08	26	1.47E+06	465	3.90E+02	ALT (KM)
3	2.40E+08	49	1.40E+06	743	1.35E+00	8.979
5	1.77E+08	72	4.38E+04	1088	0.	
7	1.51E+08	95	1.02E+05	1433	0.	TEMP (C)
9	9.59E+07	118	2.17E+05	1778	0.	-40.6
11	7.02E+07	141	8.20E+04	2123	0.	
12	4.95E+07	164	6.97E+04	2468	0.	FROSTPOINT
14	5.87E+07	187	3.26E+04	2813	0.	-40.9
16	4.27E+07	210	5.82E+04	3158	0.	
18	2.20E+07	233	3.59E+04	3503	0.	TAS (M/S)
19	1.18E+07	256	3.22E+04	3848	0.	129.4
21	1.23E+07	279	1.12E+04	4193	0.	
23	1.31E+07	302	7.59E+03	4538	0.	NT (N/M3)
25	1.34E+07	325	5.13E+03	4883	0.	48311.4
27	4.98E+06	348	3.36E+03	5228	0.	
						TOTALS
IWC	1.49E-03		8.96E-03		2.99E-04	9.26E-03
MED D	17		110		218	113

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:48:34*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.4
2	2.65E+08	26	1.37E+06	465	1.01E+04	ALT (KM)
3	5.24E+08	49	1.41E+06	743	1.66E+02	8.975
5	5.48E+08	72	6.61E+04	1088	9.01E+00	
7	4.46E+08	95	8.74E+04	1433	0.	TEMP (C)
9	3.17E+08	118	9.37E+04	1778	0.	-40.6
11	2.47E+08	141	5.51E+04	2123	0.	
12	1.38E+08	164	5.46E+04	2468	0.	FROSTPOINT
14	1.60E+08	187	3.07E+04	2813	0.	-41.2
16	1.24E+08	210	8.42E+04	3158	0.	
18	6.10E+07	233	1.40E+05	3503	0.	TAS (M/S)
19	5.07E+07	256	1.11E+05	3848	0.	128.3
21	3.30E+07	279	8.65E+04	4193	0.	
23	4.25E+07	302	8.28E+04	4538	0.	NT (N/M3)
25	3.20E+07	325	7.93E+04	4883	0.	57715.5
27	2.88E+07	348	5.65E+04	5228	0.	
						TOTALS
IWC	4.63E-03		2.73E-02		1.00E-02	3.74E-02
MED D	18		146		220	159

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:49:04*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.2
2	3.19E+08	26	1.16E+06	465	4.60E+03	ALT (KM)
3	4.25E+08	49	1.40E+06	743	4.47E+01	8.979
5	3.76E+08	72	3.30E+04	1088	9.47E-01	
7	3.16E+08	95	6.53E+04	1433	0.	TEMP (C)
9	2.11E+08	118	1.26E+05	1778	0.	-40.8
11	1.58E+08	141	5.38E+04	2123	0.	
12	1.03E+08	164	6.39E+04	2468	0.	FROSTPOINT
14	1.17E+08	187	4.56E+04	2813	0.	-39.6
16	8.85E+07	210	1.02E+05	3158	0.	
18	3.95E+07	233	9.49E+04	3503	0.	TAS (M/S)
19	3.71E+07	256	7.85E+04	3848	0.	128.7
21	2.53E+07	279	5.13E+04	4193	0.	
23	2.32E+07	302	4.91E+04	4538	0.	NT (N/M3)
25	2.11E+07	325	4.70E+04	4883	0.	52355.5
27	1.82E+07	348	3.21E+04	5228	0.	
						TOTALS
IWC	3.13E-03		1.96E-02		4.26E-03	2.38E-02
MED D	18		139		219	148

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:50:04*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.5
2	8.44E+08	26	1.62E+06	465	6.72E+02	ALT (KM)
3	2.53E+08	49	1.51E+06	743	2.73E+00	8.973
5	1.72E+08	72	5.90E+04	1088	0.	
7	1.29E+08	95	1.10E+05	1433	0.	TEMP (C)
9	9.86E+07	118	2.72E+05	1778	0.	-40.7
11	7.92E+07	141	9.53E+04	2123	0.	
12	5.07E+07	164	7.67E+04	2468	0.	FROSTPOINT
14	5.71E+07	187	3.45E+04	2813	0.	-40.9
16	4.30E+07	210	4.97E+04	3158	0.	
18	2.05E+07	233	3.81E+04	3503	0.	TAS (M/S)
19	1.99E+07	256	2.33E+04	3848	0.	127.5
21	1.12E+07	279	1.14E+04	4193	0.	
23	1.12E+07	302	1.02E+04	4538	0.	NT (N/M3)
25	1.22E+07	325	9.19E+03	4883	0.	53137.7
27	9.03E+06	348	5.98E+03	5228	0.	
						TOTALS
IWC	1.57E-03		9.72E-03		5.43E-04	1.13E-02
MED D	18		105		218	110

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:49:34*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.4
2	5.00E+08	26	9.18E+05	465	2.24E+03	ALT (KM)
3	2.85E+08	49	9.04E+05	743	7.67E+00	8.976
5	2.30E+08	72	5.12E+04	1088	0.	
7	1.77E+08	95	6.54E+04	1433	0.	TEMP (C)
9	1.32E+08	118	1.30E+05	1778	0.	-40.8
11	1.08E+08	141	5.93E+04	2123	0.	
12	6.45E+07	164	3.11E+04	2468	0.	FROSTPOINT
14	7.06E+07	187	1.92E+04	2813	0.	-39.9
16	5.48E+07	210	4.08E+04	3158	0.	
18	2.90E+07	233	3.28E+04	3503	0.	TAS (M/S)
19	1.66E+07	256	5.54E+04	3848	0.	128.7
21	1.63E+07	279	3.28E+04	4193	0.	
23	1.26E+07	302	3.47E+04	4538	0.	NT (N/M3)
25	1.21E+07	325	3.67E+04	4883	0.	35192.3
27	8.95E+06	348	2.32E+04	5228	0.	
						TOTALS
IWC	1.85E-03		1.25E-02		1.86E-03	1.44E-02
MED D	17		143		217	150

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:50:34*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.3
2	1.64E+09	26	7.14E+05	465	3.72E+02	ALT (KM)
3	1.35E+08	49	4.07E+05	743	3.62E+00	8.978
5	8.14E+07	72	3.30E+04	1088	4.76E-01	
7	6.13E+07	95	7.00E+04	1433	0.	TEMP (C)
9	4.87E+07	118	9.97E+04	1778	0.	-40.8
11	3.49E+07	141	2.86E+04	2123	0.	
12	2.06E+07	164	2.86E+04	2468	0.	FROSTPOINT
14	2.67E+07	187	1.22E+04	2813	0.	-41.3
16	2.33E+07	210	1.77E+04	3158	0.	
18	9.51E+06	233	1.26E+04	3503	0.	TAS (M/S)
19	6.61E+06	256	1.02E+04	3848	0.	128.1
21	7.41E+06	279	2.06E+03	4193	0.	
23	5.55E+06	302	2.64E+03	4538	0.	NT (N/M3)
25	3.70E+06	325	3.39E+03	4883	0.	16840.9
27	3.44E+06	348	2.36E+03	5228	0.	
						TOTALS
IWC	7.10E-04		3.43E-03		3.35E-04	3.77E-03
MED D	17		102		219	112

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:51:04*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.3
2	3.06E+09	26	2.09E+05	465	0.	ALT (KM)
3	6.46E+07	49	1.73E+05	743	0.	8.976
5	1.99E+07	72	1.84E+04	1088	0.	
7	2.07E+07	95	1.31E+04	1433	0.	TEMP (C)
9	1.48E+07	118	3.43E+04	1778	0.	-40.3
11	8.74E+06	141	1.10E+04	2123	0.	
12	5.83E+06	164	1.13E+04	2468	0.	FROSTPOINT
14	7.16E+06	187	3.59E+03	2813	0.	-40.3
16	5.29E+06	210	6.96E+03	3158	0.	
18	2.91E+06	233	2.53E+03	3503	0.	TAS (M/S)
19	2.12E+06	256	9.33E+02	3848	0.	128.0
21	1.85E+06	279	1.03E+03	4193	0.	
23	2.65E+06	302	0.	4538	0.	NT (N/M3)
25	2.12E+06	325	0.	4883	0.	6343.6
27	5.28E+05	348	0.	5228	0.	
						TOTALS
IWC	2.40E-04		9.38E-04		0.	9.38E-04
MED D	17		90		0	90

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:52:04*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.7
2	2.12E+09	26	9.65E+05	465	4.56E+02	ALT (KM)
3	1.23E+08	49	8.10E+05	743	0.	8.968
5	6.84E+07	72	5.97E+04	1088	0.	
7	4.86E+07	95	9.32E+04	1433	0.	TEMP (C)
9	3.75E+07	118	1.45E+05	1778	0.	-40.8
11	2.71E+07	141	4.70E+04	2123	0.	
12	1.66E+07	164	3.08E+04	2468	0.	FROSTPOINT
14	1.98E+07	187	7.98E+03	2813	0.	-41.0
16	1.39E+07	210	1.10E+04	3158	0.	
18	7.24E+06	233	4.28E+03	3503	0.	TAS (M/S)
19	7.51E+06	256	2.82E+03	3848	0.	126.2
21	4.83E+06	279	1.04E+03	4193	0.	
23	5.09E+06	302	9.75E+02	4538	0.	NT (N/M3)
25	6.44E+06	325	9.12E+02	4883	0.	28043.4
27	4.56E+06	348	8.15E+02	5228	0.	
						TOTALS
IWC	6.49E-04		3.27E-03		4.53E-04	3.73E-03
MED D	19		78		217	82

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:51:34*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.6
2	1.44E+09	26	1.02E+06	465	1.42E+03	ALT (KM)
3	1.71E+08	49	9.53E+05	743	0.	8.971
5	1.14E+08	72	7.39E+04	1088	0.	
7	8.73E+07	95	1.17E+05	1433	0.	TEMP (C)
9	5.56E+07	118	1.81E+05	1778	0.	-40.8
11	4.04E+07	141	6.87E+04	2123	0.	
12	2.79E+07	164	2.97E+04	2468	0.	FROSTPOINT
14	3.49E+07	187	1.44E+04	2813	0.	-40.7
16	2.26E+07	210	2.10E+04	3158	0.	
18	1.25E+07	233	1.35E+04	3503	0.	TAS (M/S)
19	1.06E+07	256	1.12E+04	3848	0.	127.3
21	6.92E+06	279	5.17E+03	4193	0.	
23	1.12E+07	302	3.83E+03	4538	0.	NT (N/M3)
25	1.04E+07	325	2.83E+03	4883	0.	34703.0
27	2.92E+06	348	2.53E+03	5228	0.	
						TOTALS
IWC	9.74E-04		5.12E-03		1.40E-03	6.52E-03
MED D	19		88		217	110

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:52:34*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.7
2	1.70E+09	26	9.09E+05	465	0.	ALT (KM)
3	1.43E+08	49	1.05E+06	743	0.	8.968
5	7.67E+07	72	5.98E+04	1088	0.	
7	6.41E+07	95	7.35E+04	1433	0.	TEMP (C)
9	4.79E+07	118	1.68E+05	1778	0.	-40.9
11	3.61E+07	141	5.05E+04	2123	0.	
12	2.15E+07	164	2.47E+04	2468	0.	FROSTPOINT
14	3.10E+07	187	6.56E+03	2813	0.	-41.2
16	1.91E+07	210	1.18E+04	3158	0.	
18	1.27E+07	233	5.15E+03	3503	0.	TAS (M/S)
19	8.35E+06	256	1.88E+03	3848	0.	125.9
21	6.46E+06	279	0.	4193	0.	
23	7.27E+06	302	0.	4538	0.	NT (N/M3)
25	7.80E+06	325	0.	4883	0.	33447.2
27	9.42E+06	348	0.	5228	0.	
						TOTALS
IWC	9.24E-04		3.25E-03		0.	3.25E-03
MED D	20		75		0	75

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:53:04*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.7
2	1.65E+09	26	1.06E+06	465	0.	ALT (KM)
3	1.69E+08	49	1.39E+06	743	0.	8.968
5	1.18E+08	72	1.35E+05	1088	0.	
7	9.31E+07	95	1.56E+05	1433	0.	TEMP (C)
9	5.86E+07	118	2.71E+05	1778	0.	-41.0
11	4.76E+07	141	8.41E+04	2123	0.	
12	2.93E+07	164	3.00E+04	2468	0.	FROSTPOINT
14	4.20E+07	187	5.10E+03	2813	0.	-41.1
16	2.37E+07	210	1.10E+04	3158	0.	
18	1.43E+07	233	1.72E+03	3503	0.	TAS (M/S)
19	8.06E+06	256	1.89E+03	3848	0.	125.9
21	8.62E+06	279	1.05E+03	4193	0.	
23	9.14E+06	302	0.	4538	0.	NT (N/M3)
25	8.35E+06	325	0.	4883	0.	48074.5
27	8.07E+06	348	0.	5228	0.	
						TOTALS
IWC	1.06E-03		4.65E-03		0.	4.65E-03
MED D	18		73		0	73

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:54:04*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.3
2	1.92E+09	26	6.00E+05	465	0.	ALT (KM)
3	1.02E+08	49	4.65E+05	743	0.	8.977
5	5.23E+07	72	5.18E+04	1088	0.	
7	4.43E+07	95	3.75E+04	1433	0.	TEMP (C)
9	3.58E+07	118	7.04E+04	1778	0.	-41.2
11	2.96E+07	141	1.89E+04	2123	0.	
12	1.28E+07	164	6.11E+03	2468	0.	FROSTPOINT
14	1.74E+07	187	2.15E+03	2813	0.	-41.0
16	1.09E+07	210	0.	3158	0.	
18	6.14E+06	233	0.	3503	0.	TAS (M/S)
19	6.40E+06	256	0.	3848	0.	126.9
21	4.28E+06	279	1.03E+03	4193	0.	
23	2.67E+06	302	0.	4538	0.	NT (N/M3)
25	5.61E+06	325	0.	4883	0.	15021.2
27	5.86E+06	348	0.	5228	0.	
						TOTALS
IWC	5.79E-04		1.26E-03		0.	1.26E-03
MED D	19		70		0	70

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:53:34*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.7
2	1.37E+09	26	6.99E+05	465	0.	ALT (KM)
3	1.45E+08	49	6.95E+05	743	0.	8.968
5	8.99E+07	72	1.12E+05	1088	0.	
7	7.53E+07	95	7.58E+04	1433	0.	TEMP (C)
9	5.44E+07	118	1.26E+05	1778	0.	-41.1
11	4.44E+07	141	3.37E+04	2123	0.	
12	1.96E+07	164	1.06E+04	2468	0.	FROSTPOINT
14	3.47E+07	187	4.37E+03	2813	0.	-41.4
16	2.29E+07	210	2.37E+03	3158	0.	
18	1.64E+07	233	8.62E+02	3503	0.	TAS (M/S)
19	9.15E+06	256	0.	3848	0.	126.0
21	7.01E+06	279	0.	4193	0.	
23	6.73E+06	302	0.	4538	0.	NT (N/M3)
25	8.35E+06	325	0.	4883	0.	24386.9
27	3.77E+06	348	0.	5228	0.	
						TOTALS
IWC	8.95E-04		2.17E-03		0.	2.17E-03
MED D	18		71		0	71

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *17:54:34*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.2
2	1.82E+09	26	6.57E+05	465	0.	ALT (KM)
3	1.29E+08	49	7.00E+05	743	0.	8.979
5	6.45E+07	72	9.59E+04	1088	0.	
7	4.70E+07	95	1.05E+05	1433	0.	TEMP (C)
9	3.66E+07	118	1.63E+05	1778	0.	-41.4
11	2.71E+07	141	2.99E+04	2123	0.	
12	1.46E+07	164	9.58E+03	2468	0.	FROSTPOINT
14	2.20E+07	187	2.87E+03	2813	0.	-40.8
16	1.78E+07	210	7.76E+02	3158	0.	
18	1.17E+07	233	8.47E+02	3503	0.	TAS (M/S)
19	4.78E+06	256	0.	3848	0.	127.7
21	5.84E+06	279	2.07E+03	4193	0.	
23	3.72E+06	302	0.	4538	0.	NT (N/M3)
25	5.57E+06	325	0.	4883	0.	25524.3
27	3.98E+06	348	0.	5228	0.	
						TOTALS
IWC	6.36E-04		2.40E-03		0.	2.40E-03
MED D	18		71		0	71

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:55:04*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE
2	2.74E+09	26	2.97E+04	465	0.
3	5.31E+07	49	3.12E+04	743	0.
5	9.23E+06	72	1.46E+04	1088	0.
7	1.11E+07	95	1.09E+04	1433	0.
9	5.01E+06	118	2.97E+03	1778	0.
11	6.06E+06	141	2.20E+03	2123	0.
12	3.43E+06	164	0.	2468	0.
14	4.74E+06	187	0.	2813	0.
16	4.22E+06	210	0.	3158	0.
18	2.37E+06	233	0.	3503	0.
19	5.27E+05	256	0.	3848	0.
21	7.91E+05	279	0.	4193	0.
23	5.27E+05	302	0.	4538	0.
25	1.05E+06	325	0.	4883	0.
27	1.05E+06	348	0.	5228	0.
IWC	1.48E-04		1.16E-04		0.
MED D	16		60		0

P (MB) 308.0
ALT (KM) 8.983
TEMP (C) -41.3
FROSTPOINT -41.0
TAS (M/S) 128.9
NT (N/M3) 1424.8
TOTALS 1.16E-04 60

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:56:04*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE
2	2.87E+09	26	0.	465	0.
3	3.62E+07	49	0.	743	0.
5	0.	72	0.	1088	0.
7	0.	95	0.	1433	0.
9	0.	118	0.	1778	0.
11	0.	141	0.	2123	0.
12	0.	164	0.	2468	0.
14	0.	187	0.	2813	0.
16	0.	210	0.	3158	0.
18	0.	233	0.	3503	0.
19	0.	256	0.	3848	0.
21	0.	279	0.	4193	0.
23	0.	302	0.	4538	0.
25	0.	325	0.	4883	0.
27	0.	348	0.	5228	0.
IWC	2.70E-05		0.		0.
MED D	2		0		0

P (MB) 307.8
ALT (KM) 8.988
TEMP (C) -41.4
FROSTPOINT -43.6
TAS (M/S) 130.1
NT (N/M3) 0.0
TOTALS 0. 0

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:55:34*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE
2	3.26E+09	26	0.	465	0.
3	4.45E+07	49	0.	743	0.
5	0.	72	0.	1088	0.
7	0.	95	0.	1433	0.
9	0.	118	0.	1778	0.
11	0.	141	0.	2123	0.
12	0.	164	0.	2468	0.
14	0.	187	0.	2813	0.
16	0.	210	0.	3158	0.
18	0.	233	0.	3503	0.
19	0.	256	0.	3848	0.
21	0.	279	0.	4193	0.
23	0.	302	0.	4538	0.
25	0.	325	0.	4883	0.
27	0.	348	0.	5228	0.
IWC	3.08E-05		0.		0.
MED D	2		0		0

P (MB) 307.8
ALT (KM) 8.988
TEMP (C) -41.3
FROSTPOINT -41.9
TAS (M/S) 130.2
NT (N/M3) 0.0
TOTALS 0. 0

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:56:34*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE
2	2.86E+09	26	0.	465	0.
3	5.35E+07	49	0.	743	0.
5	0.	72	0.	1088	0.
7	0.	95	0.	1433	0.
9	0.	118	0.	1778	0.
11	0.	141	0.	2123	0.
12	0.	164	0.	2468	0.
14	0.	187	0.	2813	0.
16	0.	210	0.	3158	0.
18	0.	233	0.	3503	0.
19	0.	256	0.	3848	0.
21	0.	279	0.	4193	0.
23	0.	302	0.	4538	0.
25	0.	325	0.	4883	0.
27	0.	348	0.	5228	0.
IWC	2.78E-05		0.		0.
MED D	2		0		0

P (MB) 308.2
ALT (KM) 8.980
TEMP (C) -41.4
FROSTPOINT -45.3
TAS (M/S) 128.6
NT (N/M3) 0.0
TOTALS 0. 0

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:57:04*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 309.1
2	2.96E+09	26	0.	465	0.	ALT (KM)
3	4.48E+07	49	0.	743	0.	8.981
5	0.	72	0.	1088	0.	
7	0.	95	0.	1433	0.	TEMP (C)
9	0.	118	0.	1778	0.	-41.5
11	0.	141	0.	2123	0.	
12	0.	164	0.	2468	0.	FROSTPOINT
14	0.	187	0.	2813	0.	-46.1
16	0.	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	127.7
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	0.0
27	0.	348	0.	5228	0.	
						TOTALS
IMC	2.82E-05		0.		0.	0.
MED D	2		0		0	0

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:58:04*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.8
2	3.15E+09	26	0.	465	0.	ALT (KM)
3	4.46E+07	49	0.	743	0.	8.967
5	0.	72	0.	1088	0.	
7	0.	95	0.	1433	0.	TEMP (C)
9	0.	118	0.	1778	0.	-41.5
11	0.	141	0.	2123	0.	
12	0.	164	0.	2468	0.	FROSTPOINT
14	0.	187	0.	2813	0.	-44.4
16	0.	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	124.7
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	0.0
27	0.	348	0.	5228	0.	
						TOTALS
IMC	2.99E-05		0.		0.	0.
MED D	2		0		0	0

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:57:34*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.3
2	3.05E+09	26	0.	465	0.	ALT (KM)
3	5.55E+07	49	0.	743	0.	8.978
5	0.	72	0.	1088	0.	
7	0.	95	0.	1433	0.	TEMP (C)
9	0.	118	0.	1778	0.	-41.5
11	0.	141	0.	2123	0.	
12	0.	164	0.	2468	0.	FROSTPOINT
14	0.	187	0.	2813	0.	-45.4
16	0.	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	125.7
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	0.0
27	0.	348	0.	5228	0.	
						TOTALS
IMC	2.96E-05		0.		0.	0.
MED D	2		0		0	0

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:58:34*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.9
2	3.24E+09	26	0.	465	0.	ALT (KM)
3	5.44E+07	49	0.	743	0.	8.965
5	0.	72	0.	1088	0.	
7	0.	95	0.	1433	0.	TEMP (C)
9	0.	118	0.	1778	0.	-41.4
11	0.	141	0.	2123	0.	
12	0.	164	0.	2468	0.	FROSTPOINT
14	0.	187	0.	2813	0.	-43.7
16	2.78E+05	210	0.	3158	0.	
18	0.	233	0.	3503	0.	TAS (M/S)
19	0.	256	0.	3848	0.	124.0
21	0.	279	0.	4193	0.	
23	0.	302	0.	4538	0.	NT (N/M3)
25	0.	325	0.	4883	0.	0.0
27	0.	348	0.	5228	0.	
						TOTALS
IMC	3.24E-05		0.		0.	0.
MED D	2		0		0	0

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:59:04*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 309.2
2	3.10E+09	26	9.31E+04	465	0.	ALT (KM)
3	6.77E+07	49	1.88E+05	743	0.	8.957
5	1.52E+07	72	2.31E+04	1088	0.	
7	1.27E+07	95	3.65E+04	1433	0.	TEMP (C)
9	1.10E+07	118	8.09E+04	1778	0.	-41.5
11	8.08E+06	141	2.65E+04	2123	0.	
12	4.40E+06	164	5.43E+03	2468	0.	FROSTPOINT
14	4.42E+06	187	1.49E+03	2813	0.	143.7
16	3.32E+06	210	1.61E+03	3158	0.	
18	1.38E+06	233	0.	3503	0.	TAS (M/S)
19	1.37E+06	256	0.	3848	0.	122.7
21	1.94E+06	279	0.	4193	0.	
23	2.49E+06	302	0.	4538	0.	NT (N/M3)
25	1.38E+06	325	0.	4883	0.	8365.1
27	8.31E+05	348	0.	5228	0.	
						TOTALS
IWC	1.94E-04		1.04E-03		0.	1.04E-03
MED D	18		75		0	75

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:00:04*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.9
2	1.80E+09	26	4.31E+05	465	1.07E+03	ALT (KM)
3	1.47E+08	49	3.65E+05	743	0.	8.964
5	7.20E+07	72	3.42E+04	1088	0.	
7	6.21E+07	95	5.21E+04	1433	0.	TEMP (C)
9	4.51E+07	118	1.25E+05	1778	0.	-41.5
11	3.25E+07	141	6.27E+04	2123	0.	
12	1.89E+07	164	6.46E+04	2468	0.	FROSTPOINT
14	2.49E+07	187	2.81E+04	2813	0.	-41.8
16	1.86E+07	210	5.11E+04	3158	0.	
18	6.84E+06	233	2.35E+04	3503	0.	TAS (M/S)
19	5.20E+06	256	1.73E+04	3848	0.	123.7
21	5.20E+06	279	3.20E+03	4193	0.	
23	7.66E+06	302	2.61E+03	4538	0.	NT (N/M3)
25	5.48E+06	325	2.13E+03	4883	0.	19353.3
27	4.38E+05	348	1.90E+03	5228	0.	
						TOTALS
IWC	7.01E-04		5.47E-03		1.05E-03	6.52E-03
MED D	18		111		217	117

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*17:59:34*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 309.1
2	2.67E+09	26	4.03E+05	465	0.	ALT (KM)
3	9.33E+07	49	2.04E+05	743	0.	8.960
5	3.80E+07	72	3.06E+04	1088	0.	
7	3.49E+07	95	5.92E+04	1433	0.	TEMP (C)
9	2.26E+07	118	1.02E+05	1778	0.	-41.5
11	1.46E+07	141	4.02E+04	2123	0.	
12	1.13E+07	164	2.71E+04	2468	0.	FROSTPOINT
14	1.51E+07	187	9.68E+03	2813	0.	-43.1
16	7.98E+06	210	1.21E+04	3158	0.	
18	3.58E+06	233	6.12E+03	3503	0.	TAS (M/S)
19	4.68E+06	256	6.76E+03	3848	0.	123.2
21	2.75E+06	279	0.	4193	0.	
23	1.92E+06	302	0.	4538	0.	NT (N/M3)
25	3.58E+06	325	0.	4883	0.	11444.4
27	2.48E+06	348	0.	5228	0.	
						TOTALS
IWC	3.85E-04		2.34E-03		0.	2.34E-03
MED D	18		88		0	88

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:00:34*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.7
2	1.55E+09	26	4.28E+05	465	9.92E+02	ALT (KM)
3	1.61E+08	49	4.58E+05	743	0.	8.968
5	9.38E+07	72	5.27E+04	1088	0.	
7	6.84E+07	95	8.97E+04	1433	0.	TEMP (C)
9	4.58E+07	118	1.49E+05	1778	0.	-41.4
11	3.80E+07	141	9.60E+04	2123	0.	
12	1.76E+07	164	7.74E+04	2468	0.	FROSTPOINT
14	2.71E+07	187	3.67E+04	2813	0.	-40.1
16	1.76E+07	210	6.42E+04	3158	0.	
18	1.14E+07	233	2.94E+04	3503	0.	TAS (M/S)
19	7.85E+06	256	1.05E+04	3848	0.	125.1
21	9.22E+06	279	5.27E+03	4193	0.	
23	4.87E+06	302	3.24E+03	4538	0.	NT (N/M3)
25	7.86E+06	325	1.98E+03	4883	0.	24922.8
27	3.79E+06	348	1.77E+03	5228	0.	
						TOTALS
IWC	7.87E-04		6.62E-03		9.73E-04	7.60E-03
MED D	19		106		217	114

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:01:04*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.4
2	5.28E+08	26	8.19E+05	465	3.78E+03	ALT (KM)
3	2.37E+08	49	1.07E+06	743	0.	8.974
5	1.72E+08	72	1.54E+05	1088	0.	
7	1.34E+08	95	2.66E+05	1433	0.	TEMP (C)
9	9.24E+07	118	4.51E+05	1778	0.	-41.2
11	6.93E+07	141	1.76E+05	2123	0.	
12	4.69E+07	164	1.15E+05	2468	0.	FROSTPOINT
14	5.12E+07	187	4.52E+04	2813	0.	-39.6
16	4.28E+07	210	6.14E+04	3158	0.	
18	2.13E+07	233	3.43E+04	3503	0.	TAS (M/S)
19	1.45E+07	256	2.27E+04	3848	0.	125.7
21	9.98E+06	279	1.16E+04	4193	0.	
23	1.48E+07	302	9.34E+03	4538	0.	NT (N/M3)
25	1.29E+07	325	7.55E+03	4883	0.	56567.6
27	1.05E+07	348	6.74E+03	5228	0.	
						TOTALS
IWC	1.56E-03		1.22E-02		3.73E-03	1.59E-02
MED D	18		95		217	115

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:02:04*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 309.0
2	7.06E+08	26	7.02E+05	465	1.88E+03	ALT (KM)
3	2.33E+08	49	1.01E+06	743	0.	8.963
5	1.42E+08	72	2.41E+05	1088	0.	
7	1.29E+08	95	1.91E+05	1433	0.	TEMP (C)
9	9.43E+07	118	3.84E+05	1778	0.	-40.9
11	6.69E+07	141	1.56E+05	2123	0.	
12	4.14E+07	164	8.80E+04	2468	0.	FROSTPOINT
14	4.99E+07	187	2.64E+04	2813	0.	-41.8
16	3.50E+07	210	5.15E+04	3158	0.	
18	1.92E+07	233	3.63E+04	3503	0.	TAS (M/S)
19	1.44E+07	256	1.52E+04	3848	0.	125.1
21	1.44E+07	279	1.16E+04	4193	0.	
23	1.46E+07	302	6.60E+03	4538	0.	NT (N/M3)
25	9.49E+06	325	3.75E+03	4883	0.	51538.9
27	1.19E+07	348	3.35E+03	5228	0.	
						TOTALS
IWC	1.50E-03		9.99E-03		1.85E-03	1.18E-02
MED D	19		92		217	102

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:01:34*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.6
2	8.26E+08	26	8.23E+05	465	1.25E+03	ALT (KM)
3	2.38E+08	49	8.42E+05	743	0.	8.970
5	1.31E+08	72	2.14E+05	1088	0.	
7	1.09E+08	95	2.11E+05	1433	0.	TEMP (C)
9	7.42E+07	118	4.10E+05	1778	0.	-41.0
11	5.22E+07	141	1.15E+05	2123	0.	
12	3.36E+07	164	6.49E+04	2468	0.	FROSTPOINT
14	4.30E+07	187	2.64E+04	2813	0.	-41.0
16	3.52E+07	210	3.32E+04	3158	0.	
18	1.81E+07	233	2.16E+04	3503	0.	TAS (M/S)
19	1.84E+07	256	1.23E+04	3848	0.	125.3
21	1.16E+07	279	5.28E+03	4193	0.	
23	1.33E+07	302	3.63E+03	4538	0.	NT (N/M3)
25	1.22E+07	325	2.49E+03	4883	0.	45405.7
27	8.93E+06	348	2.22E+03	5228	0.	
						TOTALS
IWC	1.39E-03		8.11E-03		1.23E-03	9.34E-03
MED D	19		84		217	91

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:02:34*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.7
2	2.63E+08	26	2.24E+06	465	1.04E+03	ALT (KM)
3	4.04E+08	49	3.32E+06	743	9.38E-01	8.968
5	3.78E+08	72	4.17E+05	1088	0.	
7	2.93E+08	95	4.56E+05	1433	0.	TEMP (C)
9	2.22E+08	118	1.04E+06	1778	0.	-40.9
11	1.61E+08	141	4.12E+05	2123	0.	
12	1.02E+08	164	2.95E+05	2468	0.	FROSTPOINT
14	1.24E+08	187	1.08E+05	2813	0.	-40.7
16	9.06E+07	210	1.40E+05	3158	0.	
18	4.99E+07	233	1.21E+05	3503	0.	TAS (M/S)
19	3.88E+07	256	7.37E+04	3848	0.	124.2
21	3.19E+07	279	3.83E+04	4193	0.	
23	2.65E+07	302	3.07E+04	4538	0.	NT (N/M3)
25	2.59E+07	325	2.46E+04	4883	0.	149464.2
27	1.86E+07	348	1.46E+04	5228	0.	
						TOTALS
IWC	3.42E-03		3.16E-02		7.09E-04	3.23E-02
MED D	18		100		217	101

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:03:04*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.8
2	1.78E+08	26	1.72E+06	465	7.45E+03	ALT (KM)
3	3.38E+08	49	2.09E+06	743	0.	8.966
5	3.06E+08	72	3.37E+05	1088	0.	
7	2.53E+08	95	4.42E+05	1433	0.	TEMP (C)
9	2.00E+08	118	7.53E+05	1778	0.	-40.8
11	1.38E+08	141	3.24E+05	2123	0.	
12	8.54E+07	164	2.04E+05	2468	0.	FROSTPOINT
14	9.98E+07	187	6.56E+04	2813	0.	-40.6
16	7.53E+07	210	1.07E+05	3158	0.	
18	3.95E+07	233	8.69E+04	3503	0.	TAS (M/S)
19	3.57E+07	256	4.21E+04	3848	0.	124.3
21	2.37E+07	279	3.08E+04	4193	0.	
23	2.75E+07	302	2.14E+04	4538	0.	NT (N/M3)
25	2.54E+07	325	1.49E+04	4883	0.	105624.5
27	1.80E+07	348	1.33E+04	5228	0.	
						TOTALS
IWC	3.01E-03		2.29E-02		7.36E-03	3.02E-02
MED D	19		98		217	121

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:04:04*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 309.2
2	9.72E+08	26	1.43E+06	465	2.54E+03	ALT (KM)
3	2.03E+08	49	1.14E+06	743	0.	8.958
5	1.38E+08	72	2.65E+05	1088	0.	
7	1.10E+08	95	2.45E+05	1433	0.	TEMP (C)
9	7.50E+07	118	4.08E+05	1778	0.	-40.6
11	5.60E+07	141	1.60E+05	2123	0.	
12	3.95E+07	164	6.61E+04	2468	0.	FROSTPOINT
14	4.78E+07	187	1.94E+04	2813	0.	-41.3
16	4.00E+07	210	3.06E+04	3158	0.	
18	2.21E+07	233	2.20E+04	3503	0.	TAS (M/S)
19	1.88E+07	256	1.26E+04	3848	0.	122.8
21	1.38E+07	279	5.38E+03	4193	0.	
23	1.05E+07	302	5.23E+03	4538	0.	NT (N/M3)
25	1.24E+07	325	5.08E+03	4883	0.	55311.2
27	7.73E+06	348	4.53E+03	5228	0.	
						TOTALS
IWC	1.44E-03		9.18E-03		2.52E-03	1.17E-02
MED D	19		83		217	96

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:03:34*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 309.0
2	4.55E+08	26	1.54E+06	465	2.65E+03	ALT (KM)
3	2.66E+08	49	1.86E+06	743	0.	8.962
5	2.00E+08	72	2.62E+05	1088	0.	
7	1.70E+08	95	4.07E+05	1433	0.	TEMP (C)
9	1.07E+08	118	5.76E+05	1778	0.	-40.7
11	8.95E+07	141	2.31E+05	2123	0.	
12	5.22E+07	164	1.08E+05	2468	0.	FROSTPOINT
14	7.35E+07	187	4.58E+04	2813	0.	-41.1
16	4.64E+07	210	5.82E+04	3158	0.	
18	2.87E+07	233	3.48E+04	3503	0.	TAS (M/S)
19	1.97E+07	256	1.53E+04	3848	0.	124.2
21	1.99E+07	279	1.38E+04	4193	0.	
23	1.69E+07	302	8.57E+03	4538	0.	NT (N/M3)
25	1.69E+07	325	5.30E+03	4883	0.	83950.3
27	1.26E+07	348	4.73E+03	5228	0.	
						TOTALS
IWC	2.00E-03		1.40E-02		2.63E-03	1.66E-02
MED D	19		86		217	94

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:04:34*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 309.4
2	2.21E+09	26	3.74E+05	465	7.68E+02	ALT (KM)
3	1.30E+08	49	3.93E+05	743	0.	8.954
5	5.62E+07	72	7.30E+04	1088	0.	
7	5.48E+07	95	7.55E+04	1433	0.	TEMP (C)
9	3.18E+07	118	1.45E+05	1778	0.	-40.6
11	2.57E+07	141	5.77E+04	2123	0.	
12	1.11E+07	164	1.45E+04	2468	0.	FROSTPOINT
14	1.91E+07	187	6.74E+03	2813	0.	-41.2
16	1.60E+07	210	1.05E+04	3158	0.	
18	4.98E+06	233	7.04E+03	3503	0.	TAS (M/S)
19	4.71E+06	256	2.92E+03	3848	0.	122.6
21	4.43E+06	279	2.15E+03	4193	0.	
23	3.60E+06	302	1.82E+03	4538	0.	NT (N/M3)
25	5.81E+06	325	1.54E+03	4883	0.	18379.9
27	3.60E+06	348	1.37E+03	5228	0.	
						TOTALS
IWC	5.57E-04		2.97E-03		7.70E-04	3.74E-03
MED D	18		82		217	91

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:05:04*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 309.3
2	2.45E+09	26	2.20E+05	465	4.72E+02	ALT (KM)
3	1.01E+08	49	4.12E+05	743	0.	8.956
5	5.36E+07	72	6.18E+04	1088	0.	
7	3.97E+07	95	7.60E+04	1433	0.	TEMP (C)
9	2.81E+07	118	1.31E+05	1778	0.	-40.5
11	2.22E+07	141	3.83E+04	2123	0.	
12	1.33E+07	164	1.18E+04	2468	0.	FROSTPOINT
14	1.81E+07	187	6.03E+03	2813	0.	-41.6
16	1.33E+07	210	7.30E+03	3158	0.	
18	7.50E+06	233	1.78E+03	3503	0.	TAS (M/S)
19	4.17E+06	256	1.95E+03	3848	0.	121.9
21	3.62E+06	279	0.	4193	0.	
23	3.61E+06	302	4.72E+02	4538	0.	NT (N/M3)
25	5.01E+06	325	9.45E+02	4883	0.	17354.0
27	3.34E+06	348	8.44E+02	5228	0.	
						TOTALS
IWC	5.20E-04		2.24E-03		4.70E-04	2.71E-03
MED D	18		77		217	82

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:06:04*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 309.0
2	1.98E+09	26	4.62E+05	465	3.89E+02	ALT (KM)
3	1.45E+08	49	4.47E+05	743	9.36E-01	8.961
5	7.98E+07	72	7.61E+04	1088	0.	
7	7.56E+07	95	1.25E+05	1433	0.	TEMP (C)
9	4.06E+07	118	1.65E+05	1778	0.	-40.6
11	4.16E+07	141	8.00E+04	2123	0.	
12	2.49E+07	164	5.04E+04	2468	0.	FROSTPOINT
14	2.90E+07	187	1.04E+04	2813	0.	-42.7
16	2.44E+07	210	1.76E+04	3158	0.	
18	7.95E+06	233	1.57E+04	3503	0.	TAS (M/S)
19	8.21E+06	256	1.06E+04	3848	0.	123.2
21	7.13E+06	279	8.53E+03	4193	0.	
23	6.85E+06	302	6.94E+03	4538	0.	NT (N/M3)
25	6.85E+06	325	5.64E+03	4883	0.	23557.1
27	4.94E+06	348	3.64E+03	5228	0.	
						TOTALS
IWC	8.32E-04		5.35E-03		2.83E-04	5.63E-03
MED D	18		97		217	100

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:05:34*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 309.2
2	2.59E+09	26	3.44E+05	465	4.35E+02	ALT (KM)
3	1.14E+08	49	2.47E+05	743	0.	8.957
5	4.08E+07	72	7.32E+04	1088	0.	
7	4.19E+07	95	8.73E+04	1433	0.	TEMP (C)
9	2.33E+07	118	1.11E+05	1778	0.	-40.5
11	2.27E+07	141	4.85E+04	2123	0.	
12	1.41E+07	164	2.55E+04	2468	0.	FROSTPOINT
14	1.94E+07	187	9.01E+03	2813	0.	-42.5
16	1.03E+07	210	8.11E+03	3158	0.	
18	8.59E+06	233	4.42E+03	3503	0.	TAS (M/S)
19	5.27E+06	256	0.	3848	0.	122.2
21	3.33E+06	279	4.32E+03	4193	0.	
23	2.77E+06	302	1.94E+03	4538	0.	NT (N/M3)
25	2.50E+06	325	8.69E+02	4883	0.	14375.4
27	3.61E+06	348	7.77E+02	5228	0.	
						TOTALS
IWC	4.79E-04		2.62E-03		4.30E-04	3.05E-03
MED D	17		84		217	90

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:06:34*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: SMALL SNOW

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.8
2	2.75E+09	26	1.54E+05	465	2.96E+02	ALT (KM)
3	1.21E+08	49	2.02E+05	743	1.40E+00	8.966
5	5.07E+07	72	1.14E+04	1088	0.	
7	3.49E+07	95	5.42E+04	1433	0.	TEMP (C)
9	3.08E+07	118	6.61E+04	1778	0.	-40.5
11	1.80E+07	141	1.71E+04	2123	0.	
12	9.56E+06	164	1.79E+04	2468	0.	FROSTPOINT
14	1.39E+07	187	6.64E+03	2813	0.	-41.8
16	1.15E+07	210	1.12E+04	3158	0.	
18	5.45E+06	233	8.69E+03	3503	0.	TAS (M/S)
19	4.64E+06	256	9.55E+03	3848	0.	124.2
21	3.00E+06	279	7.43E+03	4193	0.	
23	2.99E+06	302	4.99E+03	4538	0.	NT (N/M3)
25	4.64E+06	325	3.36E+03	4883	0.	9763.8
27	2.73E+06	348	2.25E+03	5228	0.	
						TOTALS
IWC	4.53E-04		2.71E-03		2.33E-04	2.94E-03
MED D	18		123		218	128

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:07:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.8
2	2.19E+09	26	4.13E+05	437	3.11E+03	ALT (KM)
3	1.77E+08	47	2.44E+05	706	2.87E+02	8.967
5	1.24E+08	67	5.52E+04	1011	2.25E+01	
7	1.01E+08	87	6.57E+04	1316	2.89E+00	TEMP (C)
9	7.19E+07	108	7.40E+04	1622	0.	-40.5
11	5.78E+07	128	4.68E+04	1927	0.	
12	2.97E+07	148	2.71E+04	2233	0.	FROSTPOINT
14	4.03E+07	169	5.79E+03	2538	0.	-42.6
16	2.81E+07	189	1.61E+04	2843	0.	
18	1.51E+07	209	1.65E+04	3149	0.	TAS (M/S)
19	1.24E+07	230	1.39E+04	3454	0.	125.0
21	8.11E+06	250	1.07E+04	3760	0.	
23	9.73E+06	271	1.10E+04	4065	0.	NT (N/M3)
25	7.02E+06	291	1.14E+04	4370	0.	13075.0
27	7.02E+06	311	9.49E+03	4676	0.	
						TOTALS
IWC	1.11E-03		1.95E-03		4.41E-03	6.36E-03
MED D	18		98		225	188

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:08:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.2
2	1.64E+09	26	3.04E+05	437	7.72E+02	ALT (KM)
3	1.66E+08	47	3.64E+05	706	7.70E+00	8.980
5	9.56E+07	67	8.34E+04	1011	0.	
7	7.54E+07	87	8.19E+04	1316	0.	TEMP (C)
9	5.36E+07	108	1.23E+05	1622	0.	-40.5
11	5.04E+07	128	7.88E+04	1927	0.	
12	2.20E+07	148	5.91E+04	2233	0.	FROSTPOINT
14	2.84E+07	169	1.95E+04	2538	0.	-40.8
16	2.47E+07	189	3.94E+04	2843	0.	
18	1.06E+07	209	2.68E+04	3149	0.	TAS (M/S)
19	8.23E+06	230	2.00E+04	3454	0.	127.6
21	6.37E+06	250	1.40E+04	3760	0.	
23	8.76E+06	271	1.12E+04	4065	0.	NT (N/M3)
25	7.43E+06	291	8.89E+03	4370	0.	19250.9
27	4.78E+06	311	6.33E+03	4676	0.	
						TOTALS
IWC	8.84E-04		2.64E-03		6.80E-04	3.32E-03
MED D	18		84		194	96

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:08:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.6
2	2.13E+08	26	8.25E+05	437	8.87E+03	ALT (KM)
3	3.78E+08	47	5.59E+05	706	7.79E+02	8.970
5	3.76E+08	67	1.10E+05	1011	5.39E+01	
7	3.00E+08	87	9.32E+04	1316	5.79E+00	TEMP (C)
9	2.09E+08	108	1.49E+05	1622	6.11E-01	-40.5
11	1.64E+08	128	5.06E+04	1927	0.	
12	1.08E+08	148	4.38E+04	2233	0.	FROSTPOINT
14	1.12E+08	169	2.47E+04	2538	0.	-43.3
16	8.42E+07	189	3.46E+04	2843	0.	
18	4.10E+07	209	2.51E+04	3149	0.	TAS (M/S)
19	3.37E+07	230	3.83E+04	3454	0.	125.8
21	2.45E+07	250	2.96E+04	3760	0.	
23	2.67E+07	271	3.14E+04	4065	0.	NT (N/M3)
25	2.43E+07	291	3.34E+04	4370	0.	27775.2
27	1.54E+07	311	2.77E+04	4676	0.	
						TOTALS
IWC	3.12E-03		4.62E-03		1.22E-02	1.89E-02
MED D	18		108		222	191

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:09:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.2
2	1.42E+09	26	1.14E+06	437	2.55E+03	ALT (KM)
3	2.64E+08	47	5.57E+05	706	3.57E+01	8.979
5	3.03E+08	67	3.49E+05	1011	2.68E+00	
7	2.45E+08	87	1.46E+05	1316	0.	TEMP (C)
9	1.78E+08	108	1.75E+05	1622	0.	-40.4
11	1.33E+08	128	5.85E+04	1927	0.	
12	7.88E+07	148	2.45E+04	2233	0.	FROSTPOINT
14	9.14E+07	169	1.21E+04	2538	0.	-37.4
16	7.08E+07	189	2.44E+04	2843	0.	
18	3.01E+07	209	2.85E+04	3149	0.	TAS (M/S)
19	2.69E+07	230	2.61E+04	3454	0.	128.1
21	1.98E+07	250	2.32E+04	3760	0.	
23	2.14E+07	271	2.45E+04	4065	0.	NT (N/M3)
25	1.66E+07	291	2.58E+04	4370	0.	31003.8
27	1.29E+07	311	1.87E+04	4676	0.	
						TOTALS
IWC	2.48E-03		4.07E-03		2.38E-03	6.44E-03
MED D	17		99		196	126

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:09:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 307.8
2	2.71E+08	26	2.14E+06	437	1.14E+04	ALT (KM)
3	4.16E+08	47	1.80E+06	706	3.48E+02	8.987
5	5.97E+08	67	3.30E+05	1011	2.52E+01	
7	5.24E+08	87	3.71E+05	1316	0.	TEMP (C)
9	3.68E+08	108	5.37E+05	1622	0.	-40.4
11	2.95E+08	128	1.50E+05	1927	0.	
12	1.72E+08	148	1.19E+05	2233	0.	FROSTPOINT
14	2.01E+08	169	3.46E+04	2538	0.	-38.3
16	1.53E+08	189	9.56E+04	2843	0.	
18	7.61E+07	209	7.21E+04	3149	0.	TAS (M/S)
19	5.06E+07	230	1.02E+05	3454	0.	128.8
21	4.27E+07	250	7.31E+04	3760	0.	
23	4.19E+07	271	7.47E+04	4065	0.	NT (N/M3)
25	4.43E+07	291	7.65E+04	4370	0.	81992.6
27	2.74E+07	311	5.87E+04	4676	0.	
						TOTALS
IWC	5.39E-03		1.20E-02		1.18E-02	2.37E-02
MED D	18		102		202	140

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:10:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.2
2	3.43E+08	26	1.18E+06	437	5.11E+03	ALT (KM)
3	3.32E+08	47	4.09E+05	706	2.06E+02	8.978
5	2.50E+08	67	7.09E+04	1011	6.48E+00	
7	2.05E+08	87	5.96E+04	1316	5.69E-01	TEMP (C)
9	1.55E+08	108	1.06E+05	1622	0.	-40.4
11	1.09E+08	128	4.38E+04	1927	0.	
12	6.67E+07	148	3.84E+04	2233	0.	FROSTPOINT
14	7.09E+07	169	2.92E+04	2538	0.	-39.5
16	5.50E+07	189	4.65E+04	2843	0.	
18	2.36E+07	209	5.83E+04	3149	0.	TAS (M/S)
19	2.15E+07	230	3.58E+04	3454	0.	127.6
21	1.67E+07	250	3.39E+04	3760	0.	
23	1.65E+07	271	3.16E+04	4065	0.	NT (N/M3)
25	1.83E+07	291	2.94E+04	4370	0.	21522.6
27	9.30E+06	311	2.30E+04	4676	0.	
						TOTALS
IWC	2.05E-03		4.59E-03		5.45E-03	1.00E-02
MED D	18		105		204	150

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:10:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.1
2	2.82E+08	26	7.72E+05	437	6.32E+03	ALT (KM)
3	3.54E+08	47	4.51E+05	706	2.15E+02	8.980
5	2.54E+08	67	1.45E+05	1011	6.46E+00	
7	2.06E+08	87	7.17E+04	1316	0.	TEMP (C)
9	1.46E+08	108	1.43E+05	1622	0.	-40.4
11	1.00E+08	128	6.72E+04	1927	0.	
12	6.63E+07	148	4.41E+04	2233	0.	FROSTPOINT
14	8.30E+07	169	2.51E+04	2538	0.	-40.3
16	5.95E+07	189	5.24E+04	2843	0.	
18	3.04E+07	209	3.90E+04	3149	0.	TAS (M/S)
19	2.35E+07	230	4.92E+04	3454	0.	128.1
21	1.88E+07	250	3.84E+04	3760	0.	
23	1.77E+07	271	3.91E+04	4065	0.	NT (N/M3)
25	1.77E+07	291	3.98E+04	4370	0.	26694.7
27	1.19E+07	311	3.08E+04	4676	0.	
						TOTALS
IWC	2.21E-03		5.45E-03		6.50E-03	1.20E-02
MED D	18		109		202	150

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:11:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.1
2	5.33E+08	26	9.11E+05	437	3.49E+03	ALT (KM)
3	2.62E+08	47	1.33E+05	706	1.54E+02	8.982
5	1.83E+08	67	3.75E+04	1011	7.02E+00	
7	1.42E+08	87	4.72E+04	1316	0.	TEMP (C)
9	9.24E+07	108	3.88E+04	1622	0.	-40.3
11	7.65E+07	128	1.75E+04	1927	0.	
12	4.70E+07	148	6.89E+03	2233	0.	FROSTPOINT
14	4.91E+07	169	7.31E+03	2538	0.	-38.5
16	3.80E+07	189	1.05E+04	2843	0.	
18	1.83E+07	209	1.43E+04	3149	0.	TAS (M/S)
19	1.54E+07	230	2.31E+04	3454	0.	127.6
21	1.14E+07	250	1.87E+04	3760	0.	
23	9.83E+06	271	1.89E+04	4065	0.	NT (N/M3)
25	7.70E+06	291	1.90E+04	4370	0.	9165.6
27	6.90E+06	311	1.50E+04	4676	0.	
						TOTALS
IWC	1.34E-03		2.33E-03		3.80E-03	6.13E-03
MED D	17		114		205	166

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:11:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.4
2	7.72E+08	26	4.40E+05	437	3.78E+03	ALT (KM)
3	2.20E+08	47	1.34E+05	706	1.69E+02	8.975
5	1.48E+08	67	4.60E+04	1011	4.87E+00	
7	1.23E+08	87	1.99E+04	1316	5.73E-01	TEMP (C)
9	8.68E+07	108	3.56E+04	1622	0.	-40.3
11	5.70E+07	128	1.13E+04	1927	0.	
12	3.92E+07	148	1.09E+04	2233	0.	FROSTPOINT
14	4.66E+07	169	3.25E+03	2538	0.	-39.0
16	2.82E+07	189	1.58E+04	2843	0.	
18	1.52E+07	209	6.72E+03	3149	0.	TAS (M/S)
19	1.04E+07	230	1.27E+04	3454	0.	127.2
21	1.04E+07	250	1.05E+04	3760	0.	
23	6.93E+06	271	1.47E+04	4065	0.	NT (N/M3)
25	8.52E+06	291	2.05E+04	4370	0.	8209.9
27	7.20E+06	311	1.62E+04	4676	0.	
						TOTALS
IWC	1.16E-03		1.94E-03		4.12E-03	6.06E-03
MED D	17		120		205	175

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:12:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.5
2	1.52E+08	26	7.54E+05	437	1.14E+04	ALT (KM)
3	4.15E+08	47	4.42E+05	706	6.05E+02	8.973
5	3.78E+08	67	4.66E+04	1011	4.55E+01	
7	2.82E+08	87	4.29E+04	1316	1.15E+00	TEMP (C)
9	2.02E+08	108	9.60E+04	1622	0.	-40.1
11	1.56E+08	128	4.06E+04	1927	0.	
12	8.58E+07	148	3.70E+04	2233	0.	FROSTPOINT
14	1.09E+08	169	8.24E+03	2538	0.	-39.3
16	8.31E+07	189	5.16E+04	2843	0.	
18	4.18E+07	209	6.41E+04	3149	0.	TAS (M/S)
19	3.45E+07	230	4.91E+04	3454	0.	125.6
21	3.02E+07	250	4.51E+04	3760	0.	
23	2.40E+07	271	5.03E+04	4065	0.	NT (N/M3)
25	2.19E+07	291	5.61E+04	4370	0.	24706.5
27	1.67E+07	311	4.49E+04	4676	0.	
						TOTALS
IWC	3.07E-03		6.27E-03		1.32E-02	1.95E-02
MED D	18		116		210	177

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:12:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.5
2	5.37E+08	26	1.06E+06	437	5.83E+03	ALT (KM)
3	2.83E+08	47	1.97E+05	706	5.30E+02	8.974
5	2.06E+08	67	6.32E+04	1011	1.80E+01	
7	1.51E+08	87	3.51E+04	1316	1.72E+00	TEMP (C)
9	1.04E+08	108	4.27E+04	1622	0.	-40.3
11	8.32E+07	128	2.40E+04	1927	6.40E-01	
12	5.66E+07	148	1.49E+04	2233	6.80E-01	FROSTPOINT
14	6.01E+07	169	5.74E+03	2538	0.	-39.4
16	3.97E+07	189	6.18E+03	2843	0.	
18	1.96E+07	209	8.70E+03	3149	0.	TAS (M/S)
19	1.74E+07	230	8.52E+03	3454	0.	126.3
21	1.53E+07	250	9.44E+03	3760	0.	
23	1.42E+07	271	1.43E+04	4065	0.	NT (N/M3)
25	8.59E+06	291	2.15E+04	4370	0.	11078.6
27	9.67E+06	311	1.79E+04	4676	0.	
						TOTALS
IWC	1.60E-03		2.12E-03		7.95E-03	1.01E-02
MED D	18		119		222	200

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:13:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.1
2	1.25E+08	26	1.23E+06	437	1.06E+04	ALT (KM)
3	4.42E+08	47	4.40E+05	706	3.90E+02	8.981
5	4.39E+08	67	9.69E+04	1011	2.02E+01	
7	3.38E+08	87	6.02E+04	1316	5.76E-01	TEMP (C)
9	2.43E+08	108	8.88E+04	1622	0.	-40.3
11	1.82E+08	128	3.16E+04	1927	0.	
12	1.08E+08	148	2.49E+04	2233	0.	FROSTPOINT
14	1.28E+08	169	1.07E+04	2538	0.	-39.6
16	9.67E+07	189	2.57E+04	2843	0.	
18	4.48E+07	209	5.12E+04	3149	0.	TAS (M/S)
19	4.16E+07	230	6.59E+04	3454	0.	126.2
21	3.20E+07	250	6.73E+04	3760	0.	
23	2.95E+07	271	6.59E+04	4065	0.	NT (N/M3)
25	2.44E+07	291	6.45E+04	4370	0.	25879.0
27	2.20E+07	311	5.02E+04	4676	0.	
						TOTALS
IWC	3.61E-03		7.15E-03		1.12E-02	1.84E-02
MED D	18		117		203	163

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:13:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.5
2	1.91E+08	26	1.13E+06	437	9.15E+03	ALT (KM)
3	4.04E+08	47	5.39E+05	706	1.81E+02	8.973
5	3.79E+08	67	4.21E+04	1011	4.91E+00	
7	3.05E+08	87	4.77E+04	1316	0.	TEMP (C)
9	2.12E+08	108	7.51E+04	1622	0.	-40.1
11	1.62E+08	128	1.90E+04	1927	0.	
12	9.18E+07	148	3.78E+04	2233	0.	FROSTPOINT
14	1.12E+08	169	1.64E+04	2538	0.	-39.8
16	8.43E+07	189	5.76E+04	2843	0.	
18	3.81E+07	209	7.06E+04	3149	0.	TAS (M/S)
19	3.17E+07	230	8.40E+04	3454	0.	126.2
21	2.60E+07	250	5.79E+04	3760	0.	
23	2.36E+07	271	6.69E+04	4065	0.	NT (N/M3)
25	2.07E+07	291	7.72E+04	4370	0.	27594.5
27	1.75E+07	311	5.74E+04	4676	0.	
						TOTALS
IWC	3.03E-03		8.06E-03		8.73E-03	1.68E-02
MED D	18		117		197	145

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:14:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.6
2	1.05E+08	26	1.89E+06	437	7.60E+03	ALT (KM)
3	4.42E+08	47	5.97E+05	706	1.14E+02	8.970
5	4.17E+08	67	1.61E+05	1011	2.20E+00	
7	3.32E+08	87	7.84E+04	1316	0.	TEMP (C)
9	2.34E+08	108	1.92E+05	1622	0.	-40.1
11	1.74E+08	128	1.02E+05	1927	0.	
12	1.08E+08	148	8.42E+04	2233	0.	FROSTPOINT
14	1.30E+08	169	4.55E+04	2538	0.	-39.6
16	9.63E+07	189	8.84E+04	2843	0.	
18	4.46E+07	209	9.93E+04	3149	0.	TAS (M/S)
19	3.92E+07	230	9.85E+04	3454	0.	125.3
21	2.38E+07	250	7.38E+04	3760	0.	
23	3.14E+07	271	7.42E+04	4065	0.	NT (N/M3)
25	2.38E+07	291	7.46E+04	4370	0.	38933.1
27	1.95E+07	311	5.43E+04	4676	0.	
						TOTALS
IWC	3.46E-03		9.94E-03		7.05E-03	1.70E-02
MED D	18		109		196	132

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:14:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.6
2	1.25E+08	26	7.53E+05	437	5.88E+03	ALT (KM)
3	4.10E+08	47	7.58E+05	706	9.97E+01	8.970
5	3.67E+08	67	1.31E+05	1011	2.74E+00	
7	2.95E+08	87	1.44E+05	1316	0.	TEMP (C)
9	2.01E+08	108	2.61E+05	1622	0.	-40.1
11	1.67E+08	128	1.17E+05	1927	0.	
12	9.97E+07	148	7.40E+04	2233	0.	FROSTPOINT
14	1.06E+08	169	3.63E+04	2538	0.	-39.9
16	8.22E+07	189	5.34E+04	2843	0.	
18	4.34E+07	209	6.79E+04	3149	0.	TAS (M/S)
19	3.10E+07	230	4.70E+04	3454	0.	125.7
21	2.80E+07	250	5.45E+04	3760	0.	
23	2.29E+07	271	5.43E+04	4065	0.	NT (N/M3)
25	2.53E+07	291	5.40E+04	4370	0.	39887.6
27	1.72E+07	311	3.97E+04	4676	0.	
						TOTALS
IWC	3.11E-03		7.50E-03		5.53E-03	1.30E-02
MED D	18		108		196	132

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:15:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.9
2	1.20E+08	26	8.32E+05	437	5.81E+03	ALT (KM)
3	4.33E+08	47	5.20E+05	706	6.87E+01	8.967
5	3.65E+08	67	1.03E+05	1011	2.22E+00	
7	2.93E+08	87	5.85E+04	1316	0.	TEMP (C)
9	1.92E+08	108	1.07E+05	1622	0.	-40.1
11	1.40E+08	128	5.13E+04	1927	0.	
12	8.83E+07	148	4.75E+04	2233	0.	FROSTPOINT
14	1.10E+08	169	4.58E+04	2538	0.	-39.9
16	7.93E+07	189	1.05E+05	2843	0.	
18	3.43E+07	209	1.14E+05	3149	0.	TAS (M/S)
19	3.46E+07	230	1.23E+05	3454	0.	124.4
21	2.12E+07	250	9.23E+04	3760	0.	
23	1.83E+07	271	7.73E+04	4065	0.	NT (N/M3)
25	2.13E+07	291	6.48E+04	4370	0.	33038.8
27	1.74E+07	311	4.63E+04	4676	0.	
						TOTALS
IWC	2.84E-03		9.61E-03		5.31E-03	1.49E-02
MED D	18		109		195	126

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:15:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.9
2	8.09E+07	26	1.18E+06	437	7.21E+03	ALT (KM)
3	4.38E+08	47	1.25E+06	706	1.31E+02	8.963
5	4.71E+08	67	9.45E+04	1011	5.00E+00	
7	3.56E+08	87	1.25E+05	1316	0.	TEMP (C)
9	2.63E+08	108	2.21E+05	1622	0.	-40.0
11	1.95E+08	128	1.35E+05	1927	0.	
12	1.29E+08	148	1.33E+05	2233	0.	FROSTPOINT
14	1.42E+08	169	9.87E+04	2538	0.	-40.2
16	1.03E+08	189	1.67E+05	2843	0.	
18	5.50E+07	209	1.90E+05	3149	0.	TAS (M/S)
19	3.91E+07	230	1.49E+05	3454	0.	124.0
21	3.12E+07	250	1.07E+05	3760	0.	
23	3.52E+07	271	8.27E+04	4065	0.	NT (N/M3)
25	3.06E+07	291	6.38E+04	4370	0.	60085.3
27	2.46E+07	311	4.71E+04	4676	0.	
						TOTALS
IWC	4.00E-03		1.27E-02		6.84E-03	1.96E-02
MED D	18		101		197	121

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:16:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.7
2	6.88E+08	26	6.95E+05	437	2.70E+03	ALT (KM)
3	2.78E+08	47	4.20E+05	706	4.02E+01	8.969
5	2.10E+08	67	9.86E+04	1011	5.54E-01	
7	1.52E+08	87	7.65E+04	1316	0.	TEMP (C)
9	1.03E+08	108	1.13E+05	1622	0.	-40.1
11	8.49E+07	128	7.97E+04	1927	0.	
12	5.81E+07	148	7.08E+04	2233	0.	FROSTPOINT
14	5.54E+07	169	3.59E+04	2538	0.	-40.1
16	4.04E+07	189	7.93E+04	2843	0.	
18	2.43E+07	209	7.86E+04	3149	0.	TAS (M/S)
19	1.83E+07	230	6.49E+04	3454	0.	124.2
21	1.26E+07	250	2.40E+04	3760	0.	
23	1.26E+07	271	2.52E+04	4065	0.	NT (N/M3)
25	1.39E+07	291	2.64E+04	4370	0.	25311.5
27	9.83E+06	311	1.92E+04	4676	0.	
						TOTALS
IWC	1.67E-03		5.14E-03		2.49E-03	7.63E-03
MED D	18		96		196	118

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:16:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.8
2	1.59E+08	26	9.72E+05	437	5.82E+03	ALT (KM)
3	3.88E+08	47	3.20E+05	706	9.53E+01	8.966
5	3.09E+08	67	1.16E+05	1011	1.67E+00	
7	2.42E+08	87	6.39E+04	1316	0.	TEMP (C)
9	1.79E+08	108	7.48E+04	1622	0.	-39.9
11	1.40E+08	128	3.22E+04	1927	0.	
12	7.82E+07	148	4.56E+04	2233	0.	FROSTPOINT
14	8.91E+07	169	2.92E+04	2538	0.	-40.2
16	6.83E+07	189	5.86E+04	2843	0.	
18	2.79E+07	209	8.96E+04	3149	0.	TAS (M/S)
19	3.14E+07	230	7.14E+04	3454	0.	124.0
21	2.30E+07	250	6.37E+04	3760	0.	
23	2.27E+07	271	5.89E+04	4065	0.	NT (N/M3)
25	1.64E+07	291	5.44E+04	4370	0.	24134.4
27	1.20E+07	311	3.98E+04	4676	0.	
						TOTALS
IWC	2.51E-03		7.15E-03		5.43E-03	1.26E-02
MED D	18		111		196	133

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:17:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.6
2	2.60E+09	26	1.39E+05	437	2.91E+02	ALT (KM)
3	1.03E+08	47	2.46E+05	706	1.37E+01	8.970
5	4.49E+07	67	3.42E+04	1011	5.54E-01	
7	3.21E+07	87	3.05E+04	1316	0.	TEMP (C)
9	2.26E+07	108	6.75E+04	1622	0.	-40.1
11	1.69E+07	128	2.70E+04	1927	0.	
12	1.12E+07	148	1.92E+04	2233	0.	FROSTPOINT
14	1.28E+07	169	9.16E+03	2538	0.	-39.6
16	1.06E+07	189	8.97E+03	2843	0.	
18	4.36E+06	209	1.18E+04	3149	0.	TAS (M/S)
19	4.36E+06	230	1.30E+04	3454	0.	124.5
21	3.54E+06	250	4.79E+03	3760	0.	
23	3.00E+06	271	2.66E+03	4065	0.	NT (N/M3)
25	1.90E+06	291	1.48E+03	4370	0.	9794.2
27	1.09E+06	311	1.18E+03	4676	0.	
						TOTALS
IWC	3.64E-04		1.00E-03		3.18E-04	1.32E-03
MED D	16		77		206	94

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:17:32*
PARTICLE SIZE DISTRIBUTIONG (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.4
2	2.13E+09	26	2.05E+05	437	4.31E+02	ALT (KM)
3	1.25E+08	47	1.26E+05	706	5.23E+00	8.975
5	6.20E+07	67	8.88E+04	1011	0.	
7	4.64E+07	87	3.27E+04	1316	0.	TEMP (C)
9	2.88E+07	108	8.56E+04	1622	0.	-40.1
11	2.10E+07	128	4.44E+04	1927	0.	
12	1.78E+07	148	3.10E+04	2233	0.	FROSTPOINT
14	1.54E+07	169	1.07E+04	2538	0.	-39.3
16	1.21E+07	189	1.96E+04	2843	0.	
18	5.39E+06	209	1.75E+04	3149	0.	TAS (M/S)
19	4.58E+06	230	7.45E+03	3454	0.	125.8
21	2.42E+06	250	4.75E+03	3760	0.	
23	3.23E+06	271	4.54E+03	4065	0.	NT (N/M3)
25	1.88E+06	291	4.34E+03	4370	0.	9880.4
27	3.23E+06	311	3.15E+03	4676	0.	
						TOTALS
IWC	4.44E-04		1.36E-03		3.81E-04	1.74E-03
MED D	16		81		195	91

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:18:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.4
2	2.22E+09	26	1.36E+05	437	5.69E+02	ALT (KM)
3	1.16E+08	47	1.34E+05	706	1.04E+00	8.975
5	5.01E+07	67	8.42E+03	1011	0.	
7	4.50E+07	87	5.01E+03	1316	0.	TEMP (C)
9	2.57E+07	108	2.38E+04	1622	0.	-40.0
11	2.36E+07	128	1.14E+04	1927	0.	
12	1.50E+07	148	1.69E+04	2233	0.	FROSTPOINT
14	1.34E+07	169	9.82E+03	2538	0.	-39.2
16	8.85E+06	189	1.95E+04	2843	0.	
18	4.29E+06	209	2.03E+04	3149	0.	TAS (M/S)
19	2.68E+06	230	1.38E+04	3454	0.	126.3
21	3.22E+06	250	7.08E+03	3760	0.	
23	4.28E+06	271	9.31E+03	4065	0.	NT (N/M3)
25	1.61E+06	291	1.23E+04	4370	0.	6222.8
27	2.68E+06	311	7.99E+03	4676	0.	
						TOTALS
IWC	4.04E-04		1.48E-03		4.39E-04	1.92E-03
MED D	17		106		192	121

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:18:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.5
2	1.65E+09	26	2.40E+05	437	6.49E+02	ALT (KM)
3	1.62E+08	47	9.01E+04	706	9.37E+00	8.973
5	7.55E+07	67	6.34E+04	1011	0.	
7	6.82E+07	87	3.02E+04	1316	0.	TEMP (C)
9	4.58E+07	108	8.22E+04	1622	0.	-40.1
11	3.34E+07	128	5.46E+04	1927	0.	
12	2.26E+07	148	4.09E+04	2233	0.	FROSTPOINT
14	2.37E+07	169	1.15E+04	2538	0.	-39.5
16	1.89E+07	189	4.00E+04	2843	0.	
18	6.73E+06	209	2.72E+04	3149	0.	TAS (M/S)
19	5.66E+06	230	2.35E+04	3454	0.	125.8
21	6.47E+06	250	1.43E+04	3760	0.	
23	3.51E+06	271	9.39E+03	4065	0.	NT (N/M3)
25	4.57E+06	291	6.18E+03	4370	0.	10288.1
27	3.78E+06	311	4.52E+03	4676	0.	
						TOTALS
IWC	6.50E-04		2.08E-03		5.88E-04	2.67E-03
MED D	17		90		195	101

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:19:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.5
2	1.95E+09	26	1.37E+05	437	4.60E+02	ALT (KM)
3	1.39E+08	47	1.62E+05	706	1.55E+00	8.973
5	5.80E+07	67	2.95E+04	1011	0.	
7	4.54E+07	87	2.01E+04	1316	0.	TEMP (C)
9	3.44E+07	108	5.30E+04	1622	0.	-40.0
11	2.60E+07	128	4.31E+04	1927	0.	
12	1.56E+07	148	2.79E+04	2233	0.	FROSTPOINT
14	1.83E+07	169	1.40E+04	2538	0.	-39.7
16	1.53E+07	189	2.92E+04	2843	0.	
18	8.32E+06	209	3.00E+04	3149	0.	TAS (M/S)
19	4.03E+06	230	1.81E+04	3454	0.	126.1
21	2.95E+06	250	9.47E+03	3760	0.	
23	3.76E+06	271	8.59E+03	4065	0.	NT (N/M3)
25	4.57E+06	291	7.80E+03	4370	0.	9418.3
27	4.03E+06	311	5.26E+03	4676	0.	
						TOTALS
IWC	5.49E-04		1.79E-03		3.67E-04	2.35E-03
MED D	17		92		192	100

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:19:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.6
2	1.94E+09	26	1.03E+05	437	3.65E+02	ALT (KM)
3	1.53E+08	47	2.25E+05	706	1.56E+00	8.970
5	6.93E+07	67	3.81E+04	1011	0.	
7	4.93E+07	87	4.29E+04	1316	0.	TEMP (C)
9	3.56E+07	108	5.48E+04	1622	0.	-40.0
11	2.59E+07	128	3.81E+04	1927	0.	
12	1.43E+07	148	4.50E+04	2233	0.	FROSTPOINT
14	2.51E+07	169	2.72E+04	2538	0.	-39.8
16	1.70E+07	189	4.00E+04	2843	0.	
18	6.20E+06	209	3.98E+04	3149	0.	TAS (M/S)
19	6.20E+06	230	2.35E+04	3454	0.	125.7
21	3.50E+06	250	1.07E+04	3760	0.	
23	7.28E+06	271	7.62E+03	4065	0.	NT (N/M3)
25	6.20E+06	291	5.44E+03	4370	0.	12337.9
27	4.58E+06	311	3.73E+03	4676	0.	
						TOTALS
IWC	6.64E-04		2.09E-03		2.93E-04	2.38E-03
MED D	19		89		193	92

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:20:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.8
2	1.87E+09	26	2.42E+05	437	5.31E+02	ALT (KM)
3	1.54E+08	47	2.64E+05	706	1.05E+00	8.967
5	6.77E+07	67	2.13E+04	1011	0.	
7	6.06E+07	87	2.29E+04	1316	0.	TEMP (C)
9	3.53E+07	108	5.01E+04	1622	0.	-40.0
11	2.96E+07	128	2.18E+04	1927	0.	
12	2.45E+07	148	3.83E+04	2233	0.	FROSTPOINT
14	2.12E+07	169	2.82E+04	2538	0.	-39.0
16	1.41E+07	189	3.95E+04	2843	0.	
18	1.06E+07	209	5.28E+04	3149	0.	TAS (M/S)
19	6.79E+06	230	2.91E+04	3454	0.	124.8
21	4.62E+06	250	1.91E+04	3760	0.	
23	5.71E+06	271	1.45E+04	4065	0.	NT (N/M3)
25	5.16E+06	291	1.10E+04	4370	0.	12715.5
27	3.53E+06	311	7.20E+03	4676	0.	
						TOTALS
IWC	6.55E-04		2.62E-03		4.11E-04	3.03E-03
MED D	18		95		192	101

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:20:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PPECIP PROBE	P (MB) 308.7
2	1.76E+09	26	2.75E+05	437	7.78E+03	ALT (KM)
3	4.59E+08	47	3.26E+05	706	0.	8.969
5	7.87E+07	67	1.70E+04	1011	0.	
7	5.28E+07	87	1.52E+04	1316	0.	TEMP (C)
9	4.33E+07	108	4.99E+04	1622	0.	-40.0
11	2.60E+07	128	1.91E+04	1927	0.	
12	2.08E+07	148	2.21E+04	2233	0.	FROSTPOINT
14	2.98E+07	169	2.15E+04	2538	0.	-39.3
16	1.62E+07	189	5.36E+04	2843	0.	
18	8.12E+06	209	4.58E+04	3149	0.	TAS (M/S)
19	8.12E+06	230	3.54E+04	3454	0.	125.2
21	4.06E+06	250	2.62E+04	3760	0.	
23	3.79E+06	271	2.02E+04	4065	0.	NT (N/M3)
25	4.87E+06	291	1.56E+04	4370	0.	15678.7
27	4.06E+06	311	1.41E+04	4676	0.	
						TOTALS
IWC	6.53E-04		3.13E-03		6.65E-03	9.78E-03
MED D	17		102		191	167

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:21:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.8
2	1.34E+09	26	3.12E+05	437	1.25E+03	ALT (KM)
3	2.01E+08	47	2.01E+05	06	2.64E+00	8.965
5	1.20E+08	67	3.42E+04	1011	5.54E-01	
7	9.27E+07	87	4.33E+04	1316	0.	TEMP (C)
9	6.52E+07	108	5.03E+04	1622	0.	-40.0
11	4.39E+07	128	2.05E+04	1927	0.	
12	2.97E+07	148	1.82E+04	2233	0.	FROSTPOINT
14	3.41E+07	169	1.17E+04	2538	0.	-38.9
16	2.51E+07	189	2.97E+04	2843	0.	
18	1.50E+07	209	3.92E+04	3149	0.	TAS (M/S)
19	8.72E+06	230	3.89E+04	3454	0.	124.3
21	1.15E+07	250	2.88E+04	3760	0.	
23	9.54E+06	271	2.95E+04	4065	0.	NT (N/M3)
25	5.72E+06	291	3.02E+04	4370	0.	12374.7
27	5.18E+06	311	1.94E+04	4676	0.	
						TOTALS
IWC	9.95E-04		3.57E-03		1.03E-03	4.60E-03
MED D	18		112		192	121

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:21:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.8
2	2.11E+09	26	1.39E+05	437	1.87E+03	ALT (KM)
3	1.31E+08	47	1.92E+05	706	0.	8.967
5	4.98E+07	67	3.86E+04	1011	0.	
7	5.11E+07	87	3.33E+04	1316	0.	TEMP (C)
9	3.42E+07	108	6.09E+04	1622	0.	-39.9
11	2.08E+07	128	2.96E+04	1927	0.	
12	1.53E+07	148	3.65E+04	2233	0.	FROSTPOINT
14	1.42E+07	169	3.18E+04	2538	0.	-38.6
16	1.26E+07	189	4.43E+04	2843	0.	
18	5.20E+06	209	4.53E+04	3149	0.	TAS (M/S)
19	9.85E+06	230	2.92E+04	3454	0.	123.9
21	5.20E+06	250	7.22E+03	3760	0.	
23	5.47E+06	271	5.20E+03	4065	0.	NT (N/M3)
25	3.28E+06	291	3.74E+03	4370	0.	11856.6
27	3.83E+06	311	3.39E+03	4676	0.	
						TOTALS
IWC	5.65E-04		2.04E-03		1.60E-03	3.64E-03
MED D	19		88		191	118

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:22:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 309.1
2	1.76E+09	26	1.05E+05	437	5.88E+03	ALT (KM)
3	1.58E+08	47	3.78E+05	706	0.	8.960
5	8.46E+07	67	3.89E+04	1011	0.	
7	7.11E+07	87	6.18E+04	1316	0.	TEMP (C)
9	5.10E+07	108	8.23E+04	1622	0.	-39.8
11	3.44E+07	128	3.76E+04	1927	0.	
12	2.29E+07	148	5.10E+04	2233	0.	FROSTPOINT
14	2.84E+07	169	3.20E+04	2538	0.	-40.6
16	1.35E+07	189	6.36E+04	2843	0.	
18	1.02E+07	209	4.56E+04	3149	0.	TAS (M/S)
19	7.99E+06	230	2.73E+04	3454	0.	122.9
21	6.34E+06	250	1.21E+04	3760	0.	
23	5.52E+06	271	1.19E+04	4065	0.	NT (N/M3)
25	5.79E+06	291	1.18E+04	4370	0.	18961.5
27	4.13E+06	311	1.07E+04	4676	0.	
						TOTALS
IWC	7.35E-04		2.95E-03		5.02E-03	7.97E-03
MED D	18		90		191	161

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:22:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.9
2	1.80E+09	26	2.44E+05	437	5.94E+03	ALT (KM)
3	1.76E+08	47	4.49E+05	706	0.	8.965
5	8.68E+07	67	2.15E+04	1011	0.	
7	6.51E+07	87	2.81E+04	1316	0.	TEMP (C)
9	4.87E+07	108	5.92E+04	1622	0.	-39.9
11	3.61E+07	128	4.51E+04	1927	0.	
12	2.16E+07	148	3.96E+04	2233	0.	FROSTPOINT
14	2.76E+07	169	2.26E+04	2538	0.	-39.5
16	2.14E+07	189	7.77E+04	2843	0.	
18	1.10E+07	209	6.01E+04	3149	0.	TAS (M/S)
19	9.58E+06	230	2.71E+04	3454	0.	123.8
21	6.58E+06	250	2.65E+04	3760	0.	
23	3.83E+06	271	1.77E+04	4065	0.	NT (N/M3)
25	4.92E+06	291	1.19E+04	4370	0.	19631.3
27	3.28E+06	311	1.08E+04	4676	0.	
						TOTALS
IWC	7.31E-04		3.33E-03		5.07E-03	8.41E-03
MED D	17		94		191	158

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:23:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.8
2	2.09E+09	26	2.83E+05	437	5.02E+03	ALT (KM)
3	1.46E+08	47	1.49E+05	706	0.	8.967
5	6.56E+07	67	6.54E+04	1011	0.	
7	5.92E+07	87	2.08E+04	1316	0.	TEMP (C)
9	4.20E+07	108	3.54E+04	1622	0.	-39.9
11	3.14E+07	128	1.97E+04	1927	0.	
12	1.75E+07	148	1.55E+04	2233	0.	FROSTPOINT
14	2.42E+07	169	2.55E+04	2538	0.	-40.5
16	1.59E+07	189	4.68E+04	2843	0.	
18	7.79E+06	209	5.61E+04	3149	0.	TAS (M/S)
19	3.90E+06	230	3.85E+04	3454	0.	121.8
21	6.12E+06	250	1.35E+04	3760	0.	
23	3.06E+06	271	1.16E+04	4065	0.	NT (N/M3)
25	3.06E+06	291	1.00E+04	4370	0.	11692.0
27	4.74E+06	311	9.13E+03	4676	0.	
						TOTALS
IWC	6.01E-04		2.56E-03		4.29E-03	6.85E-03
MED D	17		96		191	161

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:23:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.9
2	1.91E+09	26	1.40E+05	437	5.98E+02	ALT (KM)
3	1.60E+08	47	2.12E+05	706	5.33E-01	8.965
5	7.41E+07	67	5.19E+04	1011	0.	
7	6.50E+07	87	2.58E+04	1316	0.	TEMP (C)
9	4.38E+07	108	4.03E+04	1622	0.	-39.9
11	3.58E+07	128	2.59E+04	1927	0.	
12	2.04E+07	148	3.68E+04	2233	0.	FROSTPOINT
14	2.78E+07	169	2.19E+04	2538	0.	-39.2
16	1.82E+07	189	6.64E+04	2843	0.	
18	6.89E+06	209	3.87E+04	3149	0.	TAS (M/S)
19	8.27E+06	230	3.93E+04	3454	0.	122.9
21	4.68E+06	250	1.94E+04	3760	0.	
23	4.69E+06	271	1.73E+04	4065	0.	NT (N/M3)
25	6.61E+06	291	1.54E+04	4370	0.	12757.8
27	4.69E+06	311	9.83E+03	4676	0.	
						TOTALS
IWC	7.22E-04		2.96E-03		4.37E-04	3.40E-03
MED D	18		99		192	103

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:24:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.5
2	2.08E+08	26	1.03E+06	437	6.85E+03	ALT (KM)
3	3.78E+08	47	3.42E+05	706	3.08E+02	8.974
5	3.14E+08	67	5.50E+04	1011	1.37E+01	
7	2.45E+08	87	5.03E+04	1316	1.16E+00	TEMP (C)
9	1.65E+08	108	8.90E+04	1622	0.	-40.0
11	1.17E+08	128	3.30E+04	1927	0.	
12	7.78E+07	148	2.00E+04	2233	0.	FROSTPOINT
14	9.02E+07	169	9.89E+03	2538	0.	-37.7
16	7.35E+07	189	1.33E+04	2843	0.	
18	4.15E+07	209	1.55E+04	3149	0.	TAS (M/S)
19	2.50E+07	230	7.46E+03	3454	0.	125.9
21	1.91E+07	250	1.42E+04	3760	0.	
23	1.75E+07	271	2.30E+04	4065	0.	NT (N/M3)
25	1.72E+07	291	3.71E+04	4370	0.	16737.1
27	1.32E+07	311	2.93E+04	4676	0.	
						TOTALS
IWC	2.46E-03		3.32E-03		7.54E-03	1.09E-02
MED D	17		122		206	177

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:24:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 308.6
2	7.48E+08	26	5.20E+05	437	4.58E+03	ALT (KM)
3	2.80E+08	47	6.03E+05	706	6.35E+01	8.970
5	1.95E+08	67	1.03E+05	1011	3.30E+00	
7	1.35E+08	87	8.42E+04	1316	0.	TEMP (C)
9	1.03E+08	108	1.58E+05	1622	0.	-40.0
11	8.05E+07	128	8.88E+04	1927	0.	
12	5.23E+07	148	7.49E+04	2233	0.	FROSTPOINT
14	5.17E+07	169	3.84E+04	2538	0.	-38.8
16	4.68E+07	189	7.30E+04	2843	0.	
18	2.20E+07	209	5.30E+04	3149	0.	TAS (M/S)
19	1.74E+07	230	5.07E+04	3454	0.	124.4
21	1.72E+07	250	2.63E+04	3760	0.	
23	1.36E+07	271	3.51E+04	4065	0.	NT (N/M3)
25	1.11E+07	291	4.67E+04	4370	0.	30979.2
27	9.82E+06	311	3.38E+04	4676	0.	
						TOTALS
IWC	1.66E-03		6.00E-03		4.25E-03	1.02E-02
MED D	18		104		196	132

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:25:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 307.1
2	2.84E+08	26	2.03E+06	437	8.53E+03	ALT (KM)
3	3.75E+08	47	3.89E+05	706	2.33E+02	9.004
5	2.99E+08	67	1.40E+05	1011	1.32E+01	
7	2.49E+08	87	9.59E+04	1316	5.81E-01	TEMP (C)
9	1.92E+08	108	8.75E+04	1622	0.	-40.2
11	1.28E+08	128	4.32E+04	1927	0.	
12	7.73E+07	148	1.30E+04	2233	0.	FROSTPOINT
14	9.59E+07	169	1.15E+04	2538	0.	-38.1
16	6.78E+07	189	3.29E+04	2843	0.	
18	3.46E+07	209	5.05E+04	3149	0.	TAS (M/S)
19	2.49E+07	230	5.88E+04	3454	0.	125.8
21	2.11E+07	250	5.70E+04	3760	0.	
23	1.84E+07	271	5.87E+04	4065	0.	NT (N/M3)
25	1.35E+07	291	6.05E+04	4370	0.	25357.9
27	1.49E+07	311	4.61E+04	4676	0.	
						TOTALS
IWC	2.45E-03		6.80E-03		8.59E-03	1.54E-02
MED D	17		116		200	153

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:25:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 304.3
2	1.45E+08	26	1.35E+06	437	8.84E+03	ALT (KM)
3	4.32E+08	47	6.28E+05	706	3.76E+02	9.066
5	4.22E+08	67	2.77E+05	1011	1.50E+01	
7	3.30E+08	87	2.36E+05	1316	1.17E+00	TEMP (C)
9	2.39E+08	108	2.61E+05	1622	0.	-40.7
11	1.83E+08	128	7.69E+04	1927	0.	
12	1.10E+08	148	3.03E+04	2233	0.	FROSTPOINT
14	1.34E+08	169	8.33E+03	2538	0.	-40.1
16	9.61E+07	189	2.25E+04	2843	0.	
18	5.12E+07	209	3.53E+04	3149	0.	TAS (M/S)
19	4.03E+07	230	4.63E+04	3454	0.	124.4
21	2.34E+07	250	3.23E+04	3760	0.	
23	2.40E+07	271	3.99E+04	4065	0.	NT (N/M3)
25	2.34E+07	291	4.93E+04	4370	0.	38469.2
27	1.74E+07	311	3.88E+04	4676	0.	
						TOTALS
INC	3.39E-03		6.16E-03		9.57E-03	1.57E-02
MED D	17		109		205	163

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:26:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 301.7
2	1.05E+09	26	5.16E+05	437	1.08E+03	ALT (KM)
3	2.80E+08	47	8.60E+05	706	2.10E+00	9.122
5	2.13E+08	67	2.29E+05	1011	0.	
7	1.71E+08	87	2.17E+05	1316	0.	TEMP (C)
9	1.24E+08	108	3.25E+05	1622	0.	-41.2
11	9.66E+07	128	1.36E+05	1927	0.	
12	5.71E+07	148	1.02E+05	2233	0.	FROSTPOINT
14	6.76E+07	169	5.37E+04	2538	0.	-41.8
16	5.41E+07	189	1.00E+05	2843	0.	
18	2.73E+07	209	9.74E+04	3149	0.	TAS (M/S)
19	1.92E+07	230	5.89E+04	3454	0.	125.2
21	1.49E+07	250	4.88E+04	3760	0.	
23	1.62E+07	271	3.58E+04	4065	0.	NT (N/M3)
25	1.41E+07	291	2.63E+04	4370	0.	47227.8
27	1.35E+07	311	1.69E+04	4676	0.	
						TOTALS
INC	1.96E-03		7.11E-03		8.71E-04	7.98E-03
MED D	18		90		192	94

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:26:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 303.0
2	7.49E+08	26	1.11E+06	437	1.90E+03	ALT (KM)
3	3.83E+08	47	1.29E+06	706	1.26E+01	9.094
5	4.79E+08	67	6.38E+05	1011	5.53E-01	
7	4.27E+08	87	3.62E+05	1316	0.	TEMP (C)
9	3.25E+08	108	4.31E+05	1622	0.	-41.0
11	2.36E+08	128	1.22E+05	1927	0.	
12	1.42E+08	148	3.53E+04	2233	0.	FROSTPOINT
14	1.82E+08	169	1.08E+04	2538	0.	-41.6
16	1.25E+08	189	3.05E+04	2843	0.	
18	5.78E+07	209	4.60E+04	3149	0.	TAS (M/S)
19	4.77E+07	230	5.28E+04	3454	0.	124.6
21	3.33E+07	250	3.59E+04	3760	0.	
23	3.43E+07	271	3.17E+04	4065	0.	NT (N/M3)
25	3.43E+07	291	2.80E+04	4370	0.	64312.0
27	1.85E+07	311	1.93E+04	4676	0.	
						TOTALS
INC	4.39E-03		6.49E-03		1.67E-03	8.16E-03
MED D	17		85		193	102

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:27:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 299.6
2	1.53E+09	26	6.92E+05	437	5.37E+02	ALT (KM)
3	2.18E+08	47	1.04E+06	706	5.26E-01	9.169
5	1.69E+08	67	4.27E+05	1011	0.	
7	1.42E+08	87	3.08E+05	1316	0.	TEMP (C)
9	1.08E+08	108	6.49E+05	1622	0.	-41.7
11	7.78E+07	128	3.09E+05	1927	0.	
12	4.60E+07	148	1.93E+05	2233	0.	FROSTPOINT
14	6.31E+07	169	8.98E+04	2538	0.	-40.8
16	3.89E+07	189	1.03E+05	2843	0.	
18	2.23E+07	209	6.76E+04	3149	0.	TAS (M/S)
19	1.55E+07	230	4.09E+04	3454	0.	124.5
21	1.44E+07	250	1.68E+04	3760	0.	
23	1.85E+07	271	1.48E+04	4065	0.	NT (N/M3)
25	1.61E+07	291	1.31E+04	4370	0.	66839.4
27	1.25E+07	311	8.40E+03	4676	0.	
						TOTALS
INC	1.79E-03		7.44E-03		3.92E-04	7.83E-03
MED D	19		70		192	71

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:27:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 297.8
2	6.22E+08	26	1.42E+06	437	9.61E+02	ALT (KM)
3	3.32E+08	47	3.48E+06	706	3.70E+00	9.210
5	4.26E+08	67	9.94E+05	1011	0.	
7	4.21E+08	87	1.05E+06	1316	0.	TEMP (C)
9	2.89E+08	108	1.72E+06	1622	0.	-42.0
11	2.34E+08	128	6.93E+05	1927	0.	
12	1.34E+08	148	3.04E+05	2233	0.	FROSTPOINT
14	1.69E+08	169	1.05E+05	2538	0.	-41.0
16	1.19E+08	189	1.15E+05	2843	0.	
18	6.12E+07	209	7.65E+04	3149	0.	TAS (M/S)
19	5.22E+07	230	4.96E+04	3454	0.	124.2
21	3.91E+07	250	2.52E+04	3760	0.	
23	4.24E+07	271	2.10E+04	4065	0.	NT (N/M3)
25	3.48E+07	291	1.75E+04	4370	0.	176601.3
27	2.88E+07	311	1.17E+04	4676	0.	
						TOTALS
IWC	4.67E-03		1.45E-02		8.03E-04	1.53E-02
MED D	19		61		192	62

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:28:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 294.7
2	6.04E+08	26	2.01E+06	437	3.42E+03	ALT (KM)
3	3.35E+08	47	1.86E+06	706	1.12E+02	9.280
5	3.80E+08	67	1.18E+06	1011	6.65E+00	
7	3.34E+08	87	7.51E+05	1316	0.	TEMP (C)
9	2.41E+08	108	1.06E+06	1622	0.	-42.6
11	1.74E+08	128	4.36E+05	1927	0.	
12	1.07E+08	148	2.88E+05	2233	0.	FROSTPOINT
14	1.34E+08	169	1.10E+05	2538	0.	-43.0
16	9.67E+07	189	1.60E+05	2843	0.	
18	4.28E+07	209	1.06E+05	3149	0.	TAS (M/S)
19	4.19E+07	230	7.87E+04	3454	0.	124.3
21	3.00E+07	250	5.16E+04	3760	0.	
23	3.70E+07	271	3.37E+04	4065	0.	NT (N/M3)
25	2.64E+07	291	2.20E+04	4370	0.	126071.5
27	1.80E+07	311	1.70E+04	4676	0.	
						TOTALS
IWC	3.62E-03		1.32E-02		3.54E-03	1.68E-02
MED D	18		69		202	82

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:28:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 296.5
2	3.71E+08	26	1.62E+06	437	2.69E+03	ALT (KM)
3	3.94E+08	47	3.91E+06	706	3.99E+01	9.239
5	5.25E+08	67	1.52E+06	1011	0.	
7	4.59E+08	87	1.37E+06	1316	0.	TEMP (C)
9	3.33E+08	108	1.80E+06	1622	0.	-42.2
11	2.60E+08	128	6.54E+05	1927	0.	
12	1.56E+08	148	2.51E+05	2233	0.	FROSTPOINT
14	1.75E+08	169	9.54E+04	2538	0.	-42.1
16	1.30E+08	189	1.37E+05	2843	0.	
18	6.74E+07	209	1.08E+05	3149	0.	TAS (M/S)
19	4.82E+07	230	7.21E+04	3454	0.	124.8
21	4.98E+07	250	4.18E+04	3760	0.	
23	4.77E+07	271	3.32E+04	4065	0.	NT (N/M3)
25	3.95E+07	291	2.63E+04	4370	0.	205015.5
27	3.22E+07	311	1.91E+04	4676	0.	
						TOTALS
IWC	5.18E-03		1.69E-02		2.47E-03	1.94E-02
MED D	19		61		195	65

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:29:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.7
2	4.93E+08	26	1.48E+06	437	3.33E+03	ALT (KM)
3	3.61E+08	47	3.10E+06	706	7.38E+01	9.301
5	4.24E+08	67	7.69E+05	1011	2.74E+00	
7	3.57E+08	87	7.02E+05	1316	0.	TEMP (C)
9	2.41E+08	108	1.29E+06	1622	0.	-42.8
11	1.96E+08	128	5.09E+05	1927	0.	
12	1.15E+08	148	2.78E+05	2233	0.	FROSTPOINT
14	1.36E+08	169	9.73E+04	2538	0.	-43.4
16	1.03E+08	189	1.51E+05	2843	0.	
18	5.47E+07	209	1.23E+05	3149	0.	TAS (M/S)
19	3.72E+07	230	1.02E+05	3454	0.	125.3
21	3.40E+07	250	3.92E+04	3760	0.	
23	3.18E+07	271	3.22E+04	4065	0.	NT (N/M3)
25	3.05E+07	291	2.64E+04	4370	0.	148187.4
27	2.11E+07	311	1.98E+04	4676	0.	
						TOTALS
IWC	3.83E-03		1.41E-02		3.23E-03	1.74E-02
MED D	18		68		198	80

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:29:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.1
2	5.56E+07	26	4.32E+06	437	5.09E+03	ALT (KM)
3	4.49E+08	47	5.16E+06	706	7.66E+01	9.316
5	1.01E+09	67	4.11E+06	1011	0.	
7	9.85E+08	87	2.67E+06	1316	0.	TEMP (C)
9	6.80E+08	108	3.09E+06	1622	0.	-42.9
11	5.52E+08	128	1.15E+06	1927	0.	
12	3.38E+08	148	5.33E+05	2233	0.	FROSTPOINT
14	4.05E+08	169	1.61E+05	2538	0.	-43.2
16	2.80E+08	189	2.17E+05	2843	0.	
18	1.53E+08	209	1.80E+05	3149	0.	TAS (M/S)
19	1.29E+08	230	1.16E+05	3454	0.	127.7
21	9.19E+07	250	7.00E+04	3760	0.	
23	9.99E+07	271	5.91E+04	4065	0.	NT (N/M3)
25	8.44E+07	291	4.98E+04	4370	0.	359698.2
27	7.17E+07	311	3.63E+04	4676	0.	
						TOTALS
IWC	1.12E-02		3.07E-02		4.70E-03	3.54E-02
MED D	19		60		195	65

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:30:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.0
2	8.30E+08	26	7.62E+05	437	1.15E+03	ALT (KM)
3	2.89E+08	47	1.29E+06	706	4.49E+01	9.317
5	2.42E+08	67	2.66E+05	1011	1.06E+00	
7	1.87E+08	87	2.77E+05	1316	0.	TEMP (C)
9	1.24E+08	108	5.47E+05	1622	0.	-43.1
11	9.58E+07	128	3.14E+05	1927	0.	
12	5.73E+07	148	2.08E+05	2233	0.	FROSTPOINT
14	7.13E+07	169	6.84E+04	2538	0.	-42.6
16	5.41E+07	189	1.22E+05	2843	0.	
18	2.94E+07	209	7.78E+04	3149	0.	TAS (M/S)
19	2.00E+07	230	2.17E+04	3454	0.	130.2
21	1.48E+07	250	6.87E+03	3760	0.	
23	1.77E+07	271	6.78E+03	4065	0.	NT (N/M3)
25	1.46E+07	291	6.70E+03	4370	0.	65735.4
27	1.43E+07	311	5.24E+03	4676	0.	
						TOTALS
IWC	2.04E-03		6.62E-03		1.21E-03	7.83E-03
MED D	18		68		203	73

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:30:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.1
2	1.94E+08	26	1.07E+06	437	3.37E+03	ALT (KM)
3	4.33E+08	47	3.59E+06	706	8.51E+01	9.315
5	5.64E+08	67	1.43E+06	1011	1.59E+00	
7	4.63E+08	87	1.04E+06	1316	0.	TEMP (C)
9	3.32E+08	108	1.35E+06	1622	0.	-43.0
11	2.51E+08	128	4.65E+05	1927	0.	
12	1.58E+08	148	2.41E+05	2233	0.	FROSTPOINT
14	2.00E+08	169	1.02E+05	2538	0.	-42.7
16	1.36E+08	189	1.32E+05	2843	0.	
18	7.15E+07	209	1.10E+05	3149	0.	TAS (M/S)
19	5.45E+07	230	4.77E+04	3454	0.	129.5
21	3.67E+07	250	3.11E+04	3760	0.	
23	3.95E+07	271	2.78E+04	4065	0.	NT (N/M3)
25	3.59E+07	291	2.48E+04	4370	0.	176008.4
27	2.91E+07	311	1.88E+04	4676	0.	
						TOTALS
IWC	5.01E-03		1.41E-02		3.30E-03	1.74E-02
MED D	18		62		199	71

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:31:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 292.9
2	9.18E+08	26	9.50E+05	437	3.51E+03	ALT (KM)
3	2.89E+08	47	5.09E+05	706	4.30E+01	9.320
5	2.42E+08	67	1.70E+05	1011	2.10E+00	
7	1.77E+08	87	9.17E+04	1316	0.	TEMP (C)
9	1.31E+08	108	2.12E+05	1622	0.	-43.1
11	8.82E+07	128	1.24E+05	1927	0.	
12	5.42E+07	148	8.04E+04	2233	0.	FROSTPOINT
14	7.33E+07	169	5.52E+04	2538	0.	-42.8
16	5.13E+07	189	8.59E+04	2843	0.	
18	2.55E+07	209	7.61E+04	3149	0.	TAS (M/S)
19	1.91E+07	230	7.35E+04	3454	0.	131.2
21	1.88E+07	250	4.77E+04	3760	0.	
23	1.50E+07	271	4.27E+04	4065	0.	NT (N/M3)
25	1.42E+07	291	3.82E+04	4370	0.	34094.2
27	1.08E+07	311	2.74E+04	4676	0.	
						TOTALS
IWC	1.92E-03		7.00E-03		3.22E-03	1.12E-02
MED D	18		100		195	119

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:31:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 292.8
2	8.00E+08	26	7.55E+05	437	2.06E+03	ALT (KM)
3	2.96E+08	47	1.04E+06	706	5.15E+01	9.323
5	2.28E+08	67	2.47E+05	1011	1.57E+00	
7	1.94E+08	87	1.93E+05	1316	0.	TEMP (C)
9	1.41E+08	108	3.08E+05	1622	0.	-43.2
11	9.45E+07	128	1.85E+05	1927	0.	
12	6.30E+07	148	1.28E+05	2233	0.	FROSTPOINT
14	7.64E+07	169	8.59E+04	2538	0.	-42.6
16	5.52E+07	189	1.33E+05	2843	0.	
18	3.10E+07	209	9.19E+04	3149	0.	TAS (M/S)
19	1.88E+07	230	5.93E+04	3454	0.	131.2
21	2.01E+07	250	2.04E+04	3760	0.	
23	2.09E+07	271	1.76E+04	4065	0.	NT (N/M3)
25	1.70E+07	291	1.52E+04	4370	0.	52213.5
27	1.08E+07	311	1.15E+04	4676	0.	
						TOTALS
IWC	2.14E-03		6.62E-03		2.02E-03	8.64E-03
MED D	18		82		199	91

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:32:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 292.8
2	2.09E+09	26	3.63E+05	437	1.58E+03	ALT (KM)
3	1.69E+08	47	2.61E+04	706	7.55E+01	9.321
5	8.73E+07	67	3.67E+04	1011	1.58E+00	
7	7.61E+07	87	1.94E+04	1316	0.	TEMP (C)
9	3.95E+07	108	1.98E+04	1622	0.	-43.1
11	3.17E+07	128	1.10E+04	1927	0.	
12	2.05E+07	148	4.82E+03	2233	0.	FROSTPOINT
14	2.44E+07	169	7.94E+02	2538	0.	-41.9
16	1.74E+07	189	3.43E+03	2843	0.	
18	7.80E+06	209	1.12E+04	3149	0.	TAS (M/S)
19	6.24E+06	230	1.03E+04	3454	0.	130.4
21	5.98E+06	250	1.03E+04	3760	0.	
23	4.94E+06	271	9.20E+03	4065	0.	NT (N/M3)
25	4.94E+06	291	8.23E+03	4370	0.	4010.2
27	2.86E+06	311	6.54E+03	4676	0.	
						TOTALS
IWC	6.56E-04		1.11E-03		1.73E-03	2.83E-03
MED D	17		112		206	164

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:32:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 292.9
2	1.89E+09	26	2.64E+05	437	1.71E+03	ALT (KM)
3	1.90E+08	47	1.91E+05	706	2.96E+01	9.319
5	9.99E+07	67	5.29E+04	1011	1.58E+00	
7	7.63E+07	87	2.67E+04	1316	0.	TEMP (C)
9	4.82E+07	108	1.98E+04	1622	0.	-43.1
11	3.89E+07	128	1.10E+04	1927	0.	
12	2.39E+07	148	8.65E+03	2233	0.	FROSTPOINT
14	2.85E+07	169	5.55E+03	2538	0.	-42.2
16	1.82E+07	189	2.05E+04	2843	0.	
18	1.09E+07	209	2.80E+04	3149	0.	TAS (M/S)
19	6.49E+06	230	3.08E+04	3454	0.	130.6
21	5.19E+06	250	2.05E+04	3760	0.	
23	5.71E+06	271	1.78E+04	4065	0.	NT (N/M3)
25	5.97E+06	291	1.53E+04	4370	0.	9766.4
27	4.67E+06	311	1.13E+04	4676	0.	
						TOTALS
IWC	7.64E-04		2.28E-03		1.62E-03	3.90E-03
MED D	17		108		197	131

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:33:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 292.9
2	2.12E+09	26	4.62E+05	437	1.21E+03	ALT (KM)
3	1.56E+08	47	1.13E+05	706	2.31E+01	9.319
5	8.22E+07	67	3.67E+04	1011	0.	
7	6.72E+07	87	1.46E+04	1316	0.	TEMP (C)
9	3.86E+07	108	1.32E+04	1622	0.	-43.1
11	3.06E+07	128	4.88E+03	1927	0.	
12	1.97E+07	148	2.88E+03	2233	0.	FROSTPOINT
14	2.26E+07	169	7.92E+02	2538	0.	-41.9
16	1.22E+07	189	1.71E+03	2843	0.	
18	7.52E+06	209	2.80E+03	3149	0.	TAS (M/S)
19	7.00E+06	230	9.24E+03	3454	0.	130.7
21	4.67E+06	250	1.03E+04	3760	0.	
23	4.15E+06	271	1.03E+04	4065	0.	NT (N/M3)
25	4.93E+06	291	1.03E+04	4370	0.	5128.5
27	3.63E+06	311	7.62E+03	4676	0.	
						TOTALS
IWC	6.17E-04		1.11E-03		1.14E-03	2.24E-03
MED D	18		117		197	142

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:34:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.4
2	2.38E+09	26	2.36E+05	437	5.36E+02	ALT (KM)
3	1.52E+08	47	2.22E+05	706	1.03E+00	9.307
5	6.78E+07	67	1.12E+05	1011	0.	
7	5.88E+07	87	8.43E+04	1316	0.	TEMP (C)
9	4.08E+07	108	8.93E+04	1622	0.	-42.9
11	3.15E+07	128	4.99E+04	1927	0.	
12	2.09E+07	148	2.55E+04	2233	0.	FROSTPOINT
14	2.09E+07	169	1.30E+04	2538	0.	-44.2
16	1.43E+07	189	1.92E+04	2843	0.	
18	7.95E+06	209	2.48E+04	3149	0.	TAS (M/S)
19	4.77E+06	230	8.38E+03	3454	0.	128.1
21	5.56E+06	250	6.98E+03	3760	0.	
23	5.04E+06	271	8.85E+03	4065	0.	NT (N/M3)
25	3.18E+06	291	1.12E+04	4370	0.	14010.5
27	2.91E+06	311	7.34E+03	4676	0.	
						TOTALS
IWC	5.88E-04		1.95E-03		4.13E-04	2.36E-03
MED D	17		88		192	98

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:33:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.4
2	2.10E+09	26	4.29E+05	437	8.09E+02	ALT (KM)
3	1.70E+08	47	1.22E+05	706	5.03E+00	9.310
5	8.21E+07	67	4.08E+04	1011	0.	
7	7.54E+07	87	1.70E+04	1316	0.	TEMP (C)
9	5.17E+07	108	1.65E+04	1622	0.	-43.0
11	3.28E+07	128	1.10E+04	1927	0.	
12	2.00E+07	148	1.16E+04	2233	0.	FROSTPOINT
14	2.47E+07	169	3.97E+03	2538	0.	-42.3
16	1.59E+07	189	1.89E+04	2843	0.	
18	9.10E+06	209	1.97E+04	3149	0.	TAS (M/S)
19	5.46E+06	230	1.75E+04	3454	0.	130.3
21	3.64E+06	250	2.06E+04	3760	0.	
23	6.76E+06	271	1.55E+04	4065	0.	NT (N/M3)
25	4.68E+06	291	1.17E+04	4370	0.	6998.9
27	4.42E+06	311	8.06E+03	4676	0.	
						TOTALS
IWC	6.85E-04		1.81E-03		6.92E-04	2.50E-03
MED D	17		109		193	120

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:35:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.6
2	5.60E+08	26	2.20E+06	437	6.48E+03	ALT (KM)
3	3.44E+08	47	6.95E+05	706	1.99E+02	9.303
5	3.09E+08	67	2.13E+05	1011	5.95E+00	
7	2.35E+08	87	1.72E+05	1316	0.	TEMP (C)
9	1.73E+08	108	1.91E+05	1622	0.	-42.9
11	1.37E+08	128	9.28E+04	1927	0.	
12	8.10E+07	148	7.70E+04	2233	0.	FROSTPOINT
14	1.00E+08	169	4.48E+04	2538	0.	-44.3
16	6.79E+07	189	1.00E+05	2843	0.	
18	2.69E+07	209	8.92E+04	3149	0.	TAS (M/S)
19	2.90E+07	230	8.12E+04	3454	0.	127.2
21	1.89E+07	250	4.92E+04	3760	0.	
23	2.18E+07	271	4.61E+04	4065	0.	NT (N/M3)
25	2.03E+07	291	4.31E+04	4370	0.	40628.5
27	1.22E+07	311	3.31E+04	4676	0.	
						TOTALS
IWC	2.53E-03		7.81E-03		6.55E-03	1.44E-02
MED D	18		99		201	134

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:34:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.5
2	1.15E+09	26	7.34E+05	437	1.15E+03	ALT (KM)
3	2.68E+08	47	5.27E+05	706	6.60E+00	9.307
5	2.22E+08	67	3.50E+05	1011	0.	
7	1.70E+08	87	2.82E+05	1316	0.	TEMP (C)
9	1.21E+08	108	4.38E+05	1622	0.	-42.8
11	8.66E+07	128	2.36E+05	1927	0.	
12	5.01E+07	148	1.28E+05	2233	0.	FROSTPOINT
14	6.66E+07	169	3.04E+04	2538	0.	-43.2
16	4.35E+07	189	4.24E+04	2843	0.	
18	2.23E+07	209	3.49E+04	3149	0.	TAS (M/S)
19	1.99E+07	230	3.12E+04	3454	0.	129.2
21	1.18E+07	250	2.08E+04	3760	0.	
23	1.47E+07	271	1.92E+04	4065	0.	NT (N/M3)
25	1.02E+07	291	1.77E+04	4370	0.	44440.7
27	9.71E+06	311	1.21E+04	4676	0.	
						TOTALS
IWC	1.69E-03		5.51E-03		9.87E-04	6.49E-03
MED D	17		70		193	81

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:36:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.6
2	1.63E+08	26	3.98E+06	437	7.10E+03	ALT (KM)
3	4.04E+08	47	2.56E+06	706	2.19E+02	9.303
5	8.13E+08	67	2.69E+06	1011	1.40E+01	
7	7.93E+08	87	1.41E+06	1316	0.	TEMP (C)
9	5.84E+08	108	1.57E+06	1622	0.	-42.7
11	4.35E+08	128	5.44E+05	1927	0.	
12	2.69E+08	148	2.74E+05	2233	0.	FROSTPOINT
14	3.45E+08	169	9.89E+04	2538	0.	-42.9
16	2.29E+08	189	1.45E+05	2843	0.	
18	1.29E+08	209	1.19E+05	3149	0.	TAS (M/S)
19	1.07E+08	230	1.03E+05	3454	0.	127.8
21	7.26E+07	250	7.70E+04	3760	0.	
23	8.03E+07	271	6.03E+04	4065	0.	NT (N/M3)
25	7.63E+07	291	4.71E+04	4370	0.	199701.0
27	5.14E+07	311	3.62E+04	4676	0.	
						TOTALS
IWC	9.16E-03		1.93E-02		7.29E-03	2.66E-02
MED D	18		64		202	90

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:35:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.4
2	4.42E+07	26	3.53E+06	437	9.65E+03	ALT (KM)
3	4.90E+08	47	2.46E+06	706	6.83E+02	9.309
5	9.47E+08	67	2.60E+06	1011	5.45E+01	
7	8.42E+08	87	1.35E+06	1316	2.84E+00	TEMP (C)
9	6.06E+08	108	1.79E+06	1622	6.00E-01	-42.8
11	4.68E+08	128	7.07E+05	1927	0.	
12	2.74E+08	148	3.88E+05	2233	0.	FROSTPOINT
14	3.35E+08	169	1.17E+05	2538	0.	-42.8
16	2.43E+08	189	1.68E+05	2843	0.	
18	1.18E+08	209	1.27E+05	3149	0.	TAS (M/S)
19	1.06E+08	230	8.58E+04	3454	0.	128.1
21	7.74E+07	250	4.54E+04	3760	0.	
23	7.43E+07	271	4.31E+04	4065	0.	NT (N/M3)
25	6.74E+07	291	4.09E+04	4370	0.	205270.3
27	4.79E+07	311	3.34E+04	4676	0.	
						TOTALS
IWC	9.02E-03		1.96E-02		1.24E-02	3.20E-02
MED D	18		63		217	101

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:37:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.4
2	2.64E+08	26	2.42E+06	437	5.17E+03	ALT (KM)
3	4.07E+08	47	2.12E+06	706	1.28E+02	9.309
5	7.82E+08	67	2.83E+06	1011	6.50E+00	
7	7.55E+08	87	1.30E+06	1316	5.64E-01	TEMP (C)
9	5.47E+08	108	1.35E+06	1622	0.	-42.7
11	4.14E+08	128	4.12E+05	1927	0.	
12	2.46E+08	148	2.18E+05	2233	0.	FROSTPOINT
14	3.22E+08	169	6.16E+04	2538	0.	-43.8
16	2.44E+08	189	1.10E+05	2843	0.	
18	1.15E+08	209	1.01E+05	3149	0.	TAS (M/S)
19	9.41E+07	230	8.30E+04	3454	0.	127.8
21	6.87E+07	250	5.37E+04	3760	0.	
23	7.00E+07	271	4.56E+04	4065	0.	NT (N/M3)
25	6.30E+07	291	3.87E+04	4370	0.	179517.6
27	4.64E+07	311	2.93E+04	4676	0.	
						TOTALS
IWC	8.42E-03		1.61E-02		5.12E-03	2.12E-02
MED D	18		61		199	82

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:36:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.6
2	4.43E+07	26	2.75E+06	437	7.22E+03	ALT (KM)
3	4.69E+08	47	2.55E+06	706	2.26E+02	9.305
5	8.03E+08	67	1.57E+06	1011	1.18E+01	
7	6.76E+08	87	9.77E+05	1316	0.	TEMP (C)
9	4.90E+08	108	1.50E+06	1622	0.	-42.7
11	3.68E+08	128	6.04E+05	1927	0.	
12	2.18E+08	148	3.78E+05	2233	0.	FROSTPOINT
14	2.71E+08	169	1.21E+05	2538	0.	-42.1
16	1.94E+08	189	2.18E+05	2843	0.	
18	9.38E+07	209	1.82E+05	3149	0.	TAS (M/S)
19	6.98E+07	230	1.07E+05	3454	0.	128.5
21	6.27E+07	250	6.50E+04	3760	0.	
23	6.43E+07	271	5.56E+04	4065	0.	NT (N/M3)
25	5.72E+07	291	4.76E+04	4370	0.	173003.1
27	3.90E+07	311	3.66E+04	4676	0.	
						TOTALS
IWC	7.24E-03		1.90E-02		7.40E-03	2.64E-02
MED D	18		71		201	92

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:38:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.6
2	2.36E+09	26	1.69E+05	437	2.19E+02	ALT (KM)
3	1.72E+08	47	6.40E+05	706	0.	9.303
5	7.41E+07	67	2.87E+05	1011	0.	
7	7.36E+07	87	2.08E+05	1316	0.	TEMP (C)
9	5.13E+07	108	3.78E+05	1622	0.	-43.0
11	3.22E+07	128	1.71E+05	1927	0.	
12	2.42E+07	148	7.48E+04	2233	0.	FROSTPOINT
14	2.58E+07	169	2.03E+04	2538	0.	-42.4
16	2.07E+07	189	4.03E+04	2843	0.	
18	7.70E+06	209	1.72E+04	3149	0.	TAS (M/S)
19	6.11E+06	230	1.05E+04	3454	0.	127.6
21	7.44E+06	250	2.34E+03	3760	0.	
23	7.71E+06	271	1.01E+03	4065	0.	NT (N/M3)
25	5.84E+06	291	4.37E+02	4370	0.	37763.6
27	5.58E+06	311	3.98E+02	4676	0.	
						TOTALS
IWC	7.99E-04		3.08E-03		1.87E-04	3.26E-03
MED D	19		61		191	62

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:37:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PPECIP PROBE	P (MB) 293.2
2	2.92E+08	26	2.72E+06	437	9.69E+03	ALT (KM)
3	3.73E+08	47	1.81E+06	706	7.61E+02	9.313
5	6.49E+08	67	2.37E+06	1011	8.55E+01	
7	7.64E+08	87	1.05E+06	1316	1.02E+01	TEMP (C)
9	5.51E+08	108	1.11E+06	1622	2.39E+00	-42.9
11	4.47E+08	128	3.45E+05	1927	6.35E-01	
12	2.52E+08	148	1.99E+05	2233	0.	FROSTPOINT
14	3.17E+08	169	5.90E+04	2538	0.	-43.9
16	2.32E+08	189	1.04E+05	2843	0.	
18	1.17E+08	209	1.04E+05	3149	0.	TAS (M/S)
19	9.02E+07	230	8.49E+04	3454	0.	128.1
21	7.80E+07	250	4.19E+04	3760	0.	
23	7.22E+07	271	4.03E+04	4065	0.	NT (N/M3)
25	6.43E+07	291	3.87E+04	4370	0.	152871.3
27	5.11E+07	311	3.19E+04	4676	0.	
						TOTALS
IWC	8.60E-03		1.43E-02		1.36E-02	2.79E-02
MED D	18		64		224	137

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:39:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.6
2	2.96E+09	26	6.75E+04	437	0.	ALT (KM)
3	1.21E+08	47	1.43E+05	706	0.	9.303
5	4.05E+07	67	1.30E+05	1011	0.	
7	2.82E+07	87	4.98E+04	1316	0.	TEMP (C)
9	1.46E+07	108	8.64E+04	1622	0.	-42.9
11	1.36E+07	128	2.63E+04	1927	0.	
12	1.09E+07	148	1.48E+04	2233	0.	FROSTPOINT
14	1.04E+07	169	8.14E+02	2538	0.	-43.1
16	6.93E+06	189	1.76E+03	2843	0.	
18	2.13E+06	209	9.55E+02	3149	0.	TAS (M/S)
19	3.73E+06	230	1.06E+03	3454	0.	127.2
21	2.93E+06	250	0.	3760	0.	
23	3.20E+06	271	0.	4065	0.	NT (N/M3)
25	3.19E+06	291	0.	4370	0.	9246.6
27	1.06E+06	311	0.	4676	0.	
						TOTALS
IWC	3.31E-04		5.90E-04		0.	5.90E-04
MED D	18		56		0	56

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:38:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.2
2	2.10E+09	26	2.69E+05	437	2.74E+02	ALT (KM)
3	1.76E+08	47	1.95E+05	706	1.03E+00	9.313
5	7.55E+07	67	2.08E+05	1011	0.	
7	6.81E+07	87	1.24E+05	1316	0.	TEMP (C)
9	4.26E+07	108	1.68E+05	1622	0.	-43.0
11	3.87E+07	128	1.12E+05	1927	0.	
12	2.01E+07	148	6.67E+04	2233	0.	FROSTPOINT
14	2.89E+07	169	1.30E+04	2538	0.	-42.6
16	1.62E+07	189	3.23E+04	2843	0.	
18	8.74E+06	209	2.96E+04	3149	0.	TAS (M/S)
19	8.47E+06	230	1.99E+04	3454	0.	127.9
21	6.09E+06	250	6.99E+03	3760	0.	
23	5.30E+06	271	5.27E+03	4065	0.	NT (N/M3)
25	6.89E+06	291	3.98E+03	4370	0.	20166.8
27	6.89E+06	311	2.74E+03	4676	0.	
						TOTALS
IWC	8.00E-04		2.49E-03		2.14E-04	2.78E-03
MED D	19		71		192	74

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:40:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.9
2	3.04E+09	26	3.41E+04	437	2.96E+02	ALT (KM)
3	1.24E+08	47	1.17E+05	706	0.	9.296
5	2.88E+07	67	9.29E+04	1011	0.	
7	2.23E+07	87	6.03E+04	1316	0.	TEMP (C)
9	1.67E+07	108	7.53E+04	1622	0.	-42.9
11	1.69E+07	128	3.04E+04	1927	0.	
12	7.53E+06	148	5.98E+03	2233	0.	FROSTPOINT
14	1.02E+07	169	1.64E+03	2538	0.	-46.4
16	8.34E+06	189	8.87E+02	2843	0.	
18	3.50E+06	209	1.93E+03	3149	0.	TAS (M/S)
19	2.69E+06	230	1.07E+03	3454	0.	126.0
21	2.69E+06	250	0.	3760	0.	
23	3.23E+06	271	2.96E+02	4065	0.	NT (N/M3)
25	2.42E+06	291	5.92E+02	4370	0.	7986.5
27	1.08E+06	311	5.39E+02	4676	0.	
						TOTALS
IWC	3.19E-04		5.54E-04		2.53E-04	8.07E-04
MED D	17		57		191	64

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:39:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.9
2	3.01E+09	26	3.40E+04	437	2.51E+02	ALT (KM)
3	1.27E+08	47	2.06E+05	706	0.	9.298
5	4.09E+07	67	1.68E+05	1011	0.	
7	3.15E+07	87	7.75E+04	1316	0.	TEMP (C)
9	2.00E+07	108	1.22E+05	1622	0.	-42.8
11	1.66E+07	128	8.18E+04	1927	0.	
12	8.82E+06	148	3.07E+04	2233	0.	FROSTPOINT
14	9.90E+06	169	4.09E+03	2538	0.	-44.3
16	8.29E+06	189	8.85E+03	2843	0.	
18	5.08E+06	209	2.89E+03	3149	0.	TAS (M/S)
19	4.01E+06	230	4.25E+03	3454	0.	126.7
21	1.87E+06	250	2.35E+03	3760	0.	
23	2.41E+06	271	1.09E+03	4065	0.	NT (N/M3)
25	2.14E+06	291	5.03E+02	4370	0.	14524.6
27	1.87E+06	311	4.57E+02	4676	0.	
						TOTALS
IWC	3.39E-04		1.17E-03		2.15E-04	1.39E-03
MED D	17		61		191	64

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:41:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 294.1
2	9.68E+08	26	1.76E+06	437	3.52E+02	ALT (KM)
3	3.17E+08	47	1.34E+06	706	5.22E-01	9.293
5	5.49E+08	67	3.62E+06	1011	0.	
7	5.54E+08	87	1.46E+06	1316	0.	TEMP (C)
9	3.90E+08	108	1.39E+06	1622	0.	-42.8
11	2.99E+08	128	4.37E+05	1927	0.	
12	1.73E+08	148	1.76E+05	2233	0.	FROSTPOINT
14	2.21E+08	169	3.65E+04	2538	0.	-46.2
16	1.62E+08	189	6.00E+04	2843	0.	
18	8.46E+07	209	4.88E+04	3149	0.	TAS (M/S)
19	6.51E+07	230	1.72E+04	3454	0.	124.9
21	4.80E+07	250	8.35E+03	3760	0.	
23	5.32E+07	271	7.55E+03	4065	0.	NT (N/M3)
25	4.50E+07	291	6.83E+03	4370	0.	175573.8
27	3.72E+07	311	4.52E+03	4676	0.	
						TOTALS
IWC	6.05E-03		1.23E-02		2.58E-04	1.25E-02
MED D	18		55		192	55

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:40:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.9
2	2.98E+09	26	1.36E+05	437	0.	ALT (KM)
3	1.19E+08	47	5.38E+04	706	0.	9.296
5	3.03E+07	67	7.16E+04	1011	0.	
7	2.39E+07	87	5.52E+04	1316	0.	TEMP (C)
9	2.12E+07	108	5.46E+04	1622	0.	-42.8
11	1.18E+07	128	1.90E+04	1927	0.	
12	8.85E+06	148	5.96E+03	2233	0.	FROSTPOINT
14	7.51E+06	169	1.63E+03	2538	0.	-45.5
16	8.04E+06	189	1.77E+03	2843	0.	
18	3.75E+06	209	1.93E+03	3149	0.	TAS (M/S)
19	1.61E+06	230	0.	3454	0.	126.4
21	2.15E+06	250	0.	3760	0.	
23	2.42E+06	271	0.	4065	0.	NT (N/M3)
25	1.34E+06	291	0.	4370	0.	5404.2
27	1.88E+06	311	0.	4676	0.	
						TOTALS
IWC	2.86E-04		4.02E-04		0.	4.02E-04
MED D	16		56		0	56

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:42:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.7
2	1.58E+09	26	6.18E+05	437	1.42E+03	ALT (KM)
3	2.29E+08	47	4.33E+05	706	5.73E+00	9.302
5	1.32E+08	67	1.69E+05	1011	5.47E-01	
7	1.12E+08	87	7.81E+04	1316	0.	TEMP (C)
9	8.62E+07	108	1.66E+05	1622	0.	-42.9
11	6.55E+07	128	9.64E+04	1927	0.	
12	3.18E+07	148	7.19E+04	2233	0.	FROSTPOINT
14	4.01E+07	169	3.21E+04	2538	0.	-42.1
16	2.96E+07	189	8.18E+04	2843	0.	
18	1.56E+07	209	7.67E+04	3149	0.	TAS (M/S)
19	1.24E+07	230	4.70E+04	3454	0.	125.7
21	1.05E+07	250	2.37E+04	3760	0.	
23	9.70E+06	271	2.49E+04	4065	0.	NT (N/M3)
25	8.62E+06	291	2.61E+04	4370	0.	27685.1
27	8.35E+06	311	1.74E+04	4676	0.	
						TOTALS
IWC	1.22E-03		5.08E-03		1.21E-03	6.28E-03
MED D	18		93		193	103

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:41:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 294.2
2	7.42E+08	26	1.49E+06	437	6.49E+03	ALT (KM)
3	3.14E+08	47	1.27E+06	706	7.19E+02	9.291
5	4.03E+08	67	1.51E+06	1011	8.18E+01	
7	3.75E+08	87	6.84E+05	1316	1.34E+01	TEMP (C)
9	2.67E+08	108	9.92E+05	1622	6.14E-01	-42.8
11	2.22E+08	128	2.80E+05	1927	1.30E+00	
12	1.38E+08	148	1.47E+05	2233	6.92E-01	FROSTPOINT
14	1.71E+08	169	4.41E+04	2538	0.	-44.3
16	1.09E+08	189	6.37E+04	2843	0.	
18	5.74E+07	209	5.09E+04	3149	0.	TAS (M/S)
19	5.06E+07	230	4.63E+04	3454	0.	124.5
21	4.11E+07	250	3.23E+04	3760	0.	
23	3.70E+07	271	2.64E+04	4065	0.	NT (N/M3)
25	3.05E+07	291	2.15E+04	4370	0.	107192.7
27	2.28E+07	311	1.82E+04	4676	0.	
						TOTALS
IWC	4.33E-03		9.79E-03		1.08E-02	2.06E-02
MED D	18		61		239	149

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:43:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.6
2	7.81E+08	26	8.87E+05	437	7.88E+03	ALT (KM)
3	3.20E+08	47	3.77E+05	706	4.23E+02	9.304
5	2.74E+08	67	1.30E+05	1011	2.68E+01	
7	2.19E+08	87	4.76E+04	1316	2.30E+00	TEMP (C)
9	1.60E+08	108	6.65E+04	1622	0.	-42.9
11	1.15E+08	128	3.53E+04	1927	1.29E+00	
12	6.28E+07	148	4.26E+04	2233	1.37E+00	FROSTPOINT
14	8.40E+07	169	1.88E+04	2538	0.	-42.7
16	5.72E+07	189	5.47E+04	2843	0.	
18	3.03E+07	209	5.20E+04	3149	0.	TAS (M/S)
19	2.14E+07	230	5.52E+04	3454	0.	126.4
21	1.50E+07	250	5.19E+04	3760	0.	
23	2.09E+07	271	4.49E+04	4065	0.	NT (N/M3)
25	1.74E+07	291	3.88E+04	4370	0.	23266.5
27	7.78E+06	311	3.11E+04	4676	0.	
						TOTALS
IWC	2.15E-03		5.56E-03		9.50E-03	1.51E-02
MED D	17		110		212	170

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:42:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.9
2	3.60E+08	26	3.48E+06	437	1.06E+04	ALT (KM)
3	3.80E+08	47	1.28E+06	706	5.77E+02	9.298
5	5.43E+08	67	1.79E+06	1011	6.13E+01	
7	5.12E+08	87	1.02E+06	1316	6.39E+00	TEMP (C)
9	3.69E+08	108	1.23E+06	1622	6.13E-01	-42.8
11	2.80E+08	128	5.51E+05	1927	1.30E+00	
12	1.65E+08	148	2.58E+05	2233	6.90E-01	FROSTPOINT
14	2.05E+08	169	7.88E+04	2538	0.	-42.6
16	1.53E+08	189	1.18E+05	2843	0.	
18	7.48E+07	209	9.96E+04	3149	0.	TAS (M/S)
19	6.05E+07	230	6.55E+04	3454	0.	125.1
21	4.42E+07	250	4.65E+04	3760	0.	
23	4.50E+07	271	4.89E+04	4065	0.	NT (N/M3)
25	4.64E+07	291	5.14E+04	4370	0.	138464.5
27	3.09E+07	311	4.12E+04	4676	0.	
						TOTALS
IWC	5.57E-03		1.55E-02		1.31E-02	2.86E-02
MED D	18		67		214	131

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:44:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.5
2	2.43E+09	26	2.37E+05	437	2.09E+02	ALT (KM)
3	1.66E+08	47	2.14E+05	706	5.16E-01	9.306
5	7.88E+07	67	1.55E+05	1011	0.	
7	5.01E+07	87	7.97E+04	1316	0.	TEMP (C)
9	3.62E+07	108	1.46E+05	1622	0.	-43.0
11	2.80E+07	128	1.05E+05	1927	0.	
12	1.31E+07	148	6.62E+04	2233	0.	FROSTPOINT
14	2.08E+07	169	2.85E+04	2538	0.	-43.5
16	1.57E+07	189	2.64E+04	2843	0.	
18	9.06E+06	209	2.59E+04	3149	0.	TAS (M/S)
19	7.19E+06	230	1.80E+04	3454	0.	127.2
21	3.46E+06	250	1.52E+04	3760	0.	
23	2.93E+06	271	6.82E+03	4065	0.	NT (N/M3)
25	6.66E+06	291	3.05E+03	4370	0.	18189.5
27	4.26E+06	311	2.10E+03	4676	0.	
						TOTALS
IWC	6.26E-04		2.41E-03		1.54E-04	2.57E-03
MED D	18		74		192	77

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:43:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.3
2	1.55E+09	26	8.45E+05	437	1.16E+03	ALT (KM)
3	2.36E+08	47	2.49E+05	706	4.63E+00	9.310
5	1.54E+08	67	1.46E+05	1011	0.	
7	1.12E+08	87	6.97E+04	1316	0.	TEMP (C)
9	8.09E+07	108	1.12E+05	1622	0.	-43.0
11	5.59E+07	128	7.64E+04	1927	0.	
12	3.65E+07	148	6.71E+04	2233	0.	FROSTPOINT
14	4.20E+07	169	3.58E+04	2538	0.	-42.9
16	3.35E+07	189	6.50E+04	2843	0.	
18	1.52E+07	209	7.09E+04	3149	0.	TAS (M/S)
19	1.54E+07	230	5.79E+04	3454	0.	127.4
21	7.45E+06	250	3.28E+04	3760	0.	
23	1.01E+07	271	2.63E+04	4065	0.	NT (N/M3)
25	7.98E+06	291	2.11E+04	4370	0.	21520.8
27	7.18E+06	311	1.41E+04	4676	0.	
						TOTALS
IWC	1.20E-03		4.75E-03		9.75E-04	5.72E-03
MED D	18		96		192	103

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:45:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.6
2	2.32E+09	26	6.79E+04	437	2.47E+03	ALT (KM)
3	1.68E+08	47	1.61E+05	706	0.	9.303
5	7.21E+07	67	1.59E+05	1011	0.	
7	6.25E+07	87	1.12E+05	1316	0.	TEMP (C)
9	3.53E+07	108	1.89E+05	1622	0.	-43.0
11	3.18E+07	128	9.94E+04	1927	0.	
12	2.06E+07	148	7.33E+04	2233	0.	FROSTPOINT
14	2.48E+07	169	2.20E+04	2538	0.	-44.1
16	1.87E+07	189	3.70E+04	2843	0.	
18	1.07E+07	209	3.66E+04	3149	0.	TAS (M/S)
19	6.95E+06	230	3.07E+04	3454	0.	126.8
21	6.94E+06	250	1.06E+04	3760	0.	
23	7.48E+06	271	7.22E+03	4065	0.	NT (N/M3)
25	5.88E+06	291	4.93E+03	4370	0.	19863.1
27	5.08E+06	311	4.48E+03	4676	0.	
						TOTALS
IWC	7.70E-04		2.83E-03		2.11E-03	4.94E-03
MED D	19		79		191	114

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:44:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.3
2	2.24E+09	26	1.69E+05	437	3.16E+02	ALT (KM)
3	1.75E+08	47	3.65E+05	706	1.03E+00	9.311
5	8.62E+07	67	1.80E+05	1011	0.	
7	6.79E+07	87	1.07E+05	1316	0.	TEMP (C)
9	4.52E+07	108	1.88E+05	1622	0.	-43.0
11	3.30E+07	128	9.65E+04	1927	0.	
12	1.84E+07	148	7.00E+04	2233	0.	FROSTPOINT
14	2.85E+07	169	2.52E+04	2538	0.	-43.0
16	2.26E+07	189	3.78E+04	2843	0.	
18	1.14E+07	209	2.68E+04	3149	0.	TAS (M/S)
19	7.18E+06	230	2.21E+04	3454	0.	127.3
21	5.85E+06	250	1.41E+04	3760	0.	
23	6.39E+06	271	8.33E+03	4065	0.	NT (N/M3)
25	3.46E+06	291	4.94E+03	4370	0.	23457.2
27	7.18E+06	311	3.37E+03	4676	0.	
						TOTALS
IWC	7.90E-04		2.80E-03		2.46E-04	3.14E-03
MED D	18		74		192	80

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:46:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 301.7
2	1.16E+09	26	1.22E+05	437	1.15E+03	ALT (KM)
3	2.65E+08	47	5.50E+05	706	6.95E+00	9.122
5	1.86E+08	67	2.02E+05	1011	0.	
7	1.41E+08	87	1.45E+05	1316	0.	TEMP (C)
9	9.39E+07	108	2.68E+05	1622	0.	-41.3
11	6.65E+07	128	1.25E+05	1927	0.	
12	4.43E+07	148	1.06E+05	2233	0.	FROSTPOINT
14	5.32E+07	169	4.35E+04	2538	0.	-42.4
16	3.54E+07	189	6.99E+04	2843	0.	
18	1.76E+07	209	6.48E+04	3149	0.	TAS (M/S)
19	1.82E+07	230	3.99E+04	3454	0.	140.5
21	1.40E+07	250	2.31E+04	3760	0.	
23	9.41E+06	271	1.99E+04	4065	0.	NT (N/M3)
25	9.89E+06	291	1.72E+04	4370	0.	34593.5
27	8.94E+06	311	1.18E+04	4676	0.	
						TOTALS
IWC	1.44E-03		4.97E-03		9.87E-04	5.96E-03
MED D	18		85		193	93

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:45:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 293.6
2	2.03E+09	26	3.05E+05	437	6.31E+03	ALT (KM)
3	2.15E+08	47	6.34E+05	706	0.	9.305
5	1.15E+08	67	2.01E+05	1011	0.	
7	8.16E+07	87	1.17E+05	1316	0.	TEMP (C)
9	6.77E+07	108	2.31E+05	1622	0.	-43.0
11	4.21E+07	128	1.57E+05	1927	0.	
12	2.85E+07	148	1.37E+05	2233	0.	FROSTPOINT
14	3.49E+07	169	4.73E+04	2538	0.	-43.8
16	1.97E+07	189	9.86E+04	2843	0.	
18	1.47E+07	209	5.66E+04	3149	0.	TAS (M/S)
19	1.33E+07	230	3.91E+04	3454	0.	127.1
21	6.93E+06	250	1.99E+04	3760	0.	
23	6.93E+06	271	1.59E+04	4065	0.	NT (N/M3)
25	7.73E+06	291	1.26E+04	4370	0.	37660.0
27	4.80E+06	311	1.15E+04	4676	0.	
						TOTALS
IWC	9.56E-04		5.03E-03		5.39E-03	1.04E-02
MED D	18		82		191	144

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:47:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 305.9
2	2.15E+08	26	2.60E+06	437	6.29E+03	ALT (KM)
3	3.70E+08	47	7.75E+05	706	2.20E+02	9.029
5	5.10E+08	67	9.93E+05	1011	4.75E+00	
7	4.60E+08	87	5.28E+05	1316	0.	TEMP (C)
9	2.96E+08	108	6.85E+05	1622	0.	-40.8
11	2.32E+08	128	2.56E+05	1927	0.	
12	1.30E+08	148	1.28E+05	2233	0.	FROSTPOINT
14	1.64E+08	169	2.97E+04	2538	0.	-40.9
16	1.24E+08	189	5.43E+04	2843	0.	
18	5.89E+07	209	3.60E+04	3149	0.	TAS (M/S)
19	4.64E+07	230	4.61E+04	3454	0.	145.4
21	3.18E+07	250	3.91E+04	3760	0.	
23	3.27E+07	271	3.90E+04	4065	0.	NT (N/M3)
25	3.44E+07	291	3.90E+04	4370	0.	76412.1
27	2.34E+07	311	3.02E+04	4676	0.	
						TOTALS
IWC	4.35E-03		9.10E-03		6.47E-03	1.56E-02
MED D	18		71		202	127

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START: *18:46:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 295.7
2	7.61E+08	26	1.14E+06	437	1.20E+03	ALT (KM)
3	3.02E+08	47	7.06E+05	706	2.92E+00	9.257
5	2.13E+08	67	3.61E+05	1011	0.	
7	1.79E+08	87	2.42E+05	1316	0.	TEMP (C)
9	1.27E+08	108	3.34E+05	1622	0.	-42.8
11	9.40E+07	128	2.23E+05	1927	0.	
12	4.87E+07	148	1.86E+05	2233	0.	FROSTPOINT
14	7.11E+07	169	8.16E+04	2538	0.	-42.9
16	4.92E+07	189	1.45E+05	2843	0.	
18	2.11E+07	209	9.99E+04	3149	0.	TAS (M/S)
19	2.12E+07	230	6.46E+04	3454	0.	131.4
21	1.55E+07	250	3.78E+04	3760	0.	
23	1.67E+07	271	3.20E+04	4065	0.	NT (N/M3)
25	1.65E+07	291	2.70E+04	4370	0.	52340.3
27	8.57E+06	311	1.75E+04	4676	0.	
						TOTALS
IWC	1.87E-03		8.20E-03		9.82E-04	9.18E-03
MED D	18		84		192	88

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:48:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 320.7
2	2.75E+07	26	1.37E+06	437	5.05E+03	ALT (KM)
3	4.44E+08	47	7.91E+05	706	1.23E+02	8.710
5	2.46E+09	67	5.02E+05	1011	5.24E+00	
7	2.72E+09	87	2.34E+05	1316	0.	TEMP (C)
9	1.82E+09	108	3.01E+05	1622	0.	-38.7
11	1.30E+09	128	1.17E+05	1927	0.	
12	6.72E+08	148	6.69E+04	2233	0.	FROSTPOINT
14	8.76E+08	169	1.64E+04	2538	0.	-39.2
16	5.94E+08	189	4.40E+04	2843	0.	
18	2.32E+08	209	4.57E+04	3149	0.	TAS (M/S)
19	1.58E+08	230	2.72E+04	3454	0.	157.6
21	1.06E+08	250	3.12E+04	3760	0.	
23	8.89E+07	271	3.44E+04	4065	0.	NT (N/M3)
25	5.94E+07	291	3.81E+04	4370	0.	47584.4
27	3.80E+07	311	2.87E+04	4676	0.	
						TOTALS
IWC	1.69E-02		6.18E-03		4.96E-03	1.11E-02
MED D	15		93		199	134

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:47:32*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 310.3
2	8.09E+07	26	1.52E+06	437	5.59E+03	ALT (KM)
3	3.79E+08	47	1.42E+06	706	9.35E+01	8.934
5	1.05E+09	67	9.67E+05	1011	3.72E+00	
7	1.16E+09	87	4.69E+05	1316	0.	TEMP (C)
9	7.81E+08	108	6.25E+05	1622	0.	-40.2
11	5.80E+08	128	2.63E+05	1927	0.	
12	3.30E+08	148	1.39E+05	2233	0.	FROSTPOINT
14	4.21E+08	169	4.97E+04	2538	0.	-40.1
16	3.05E+08	189	9.18E+04	2843	0.	
18	1.37E+08	209	1.10E+05	3149	0.	TAS (M/S)
19	1.04E+08	230	9.25E+04	3454	0.	150.4
21	6.99E+07	250	6.21E+04	3760	0.	
23	6.96E+07	271	5.67E+04	4065	0.	NT (N/M3)
25	6.23E+07	291	5.17E+04	4370	0.	91696.3
27	3.75E+07	311	3.79E+04	4676	0.	
						TOTALS
IWC	9.73E-03		1.16E-02		5.26E-03	1.69E-02
MED D	16		89		196	114

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:49:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 323.9
2	4.46E+07	26	1.20E+06	437	6.22E+03	ALT (KM)
3	6.73E+08	47	7.02E+05	706	2.34E+02	8.644
5	3.19E+09	67	3.78E+05	1011	7.15E+00	
7	3.17E+09	87	2.37E+05	1316	1.41E+00	TEMP (C)
9	2.04E+09	108	3.45E+05	1622	0.	-37.9
11	1.46E+09	128	9.79E+04	1927	0.	
12	7.65E+08	148	5.08E+04	2233	0.	FROSTPOINT
14	9.07E+08	169	1.08E+04	2538	0.	-38.3
16	4.70E+08	189	2.40E+04	2843	0.	
18	1.46E+08	209	2.15E+04	3149	0.	TAS (M/S)
19	7.68E+07	230	3.05E+04	3454	0.	153.9
21	5.70E+07	250	3.11E+04	3760	0.	
23	4.74E+07	271	3.40E+04	4065	0.	NT (N/M3)
25	3.51E+07	291	3.71E+04	4370	0.	42830.1
27	2.85E+07	311	2.90E+04	4676	0.	
						TOTALS
IWC	1.47E-02		5.65E-03		6.56E-03	1.22E-02
MED D	14		100		203	149

AFWL CIRRUS STUDY BY AFGL
FLIGHT E78-08 ON 19 MAR 78 30 SECOND AVERAGING
INTERVAL START:*18:48:02*
PARTICLE SIZE DISTRIBUTIONS (NUMBER/M**3-MM)
TYPE: BULL-ROSE

SIZE (MU)	SCATTER PROBE	SIZE (MU)	CLOUD PROBE	SIZE (MU)	PRECIP PROBE	P (MB) 316.3
2	3.39E+07	26	2.36E+06	437	7.04E+03	ALT (KM)
3	3.70E+08	47	1.04E+06	706	1.46E+02	8.806
5	2.13E+09	67	1.09E+06	1011	4.38E+00	
7	2.63E+09	87	4.46E+05	1316	0.	TEMP (C)
9	1.75E+09	108	4.74E+05	1622	0.	-39.4
11	1.26E+09	128	1.59E+05	1927	0.	
12	7.01E+08	148	1.12E+05	2233	0.	FROSTPOINT
14	8.58E+08	169	3.76E+04	2538	0.	-40.1
16	6.19E+08	189	7.92E+04	2843	0.	
18	2.53E+08	209	1.03E+05	3149	0.	TAS (M/S)
19	1.82E+08	230	9.25E+04	3454	0.	156.8
21	1.10E+08	250	5.52E+04	3760	0.	
23	1.12E+08	271	5.66E+04	4065	0.	NT (N/M3)
25	8.60E+07	291	5.80E+04	4370	0.	79895.2
27	5.53E+07	311	4.32E+04	4676	0.	
						TOTALS
IWC	1.81E-02		1.09E-02		6.76E-03	1.77E-02
MED D	16		94		198	125